

From wwatson5 at sbcglobal.net Thu Mar 1 18:31:50 2012  
From: wwatson5 at sbcglobal.net (William Watson)  
Date: Thu, 1 Mar 2012 15:31:50 -0800 (PST)  
Subject: [BoatAnchors] Looking for an ARC-5 Top Shroud  
Message-ID: <1330644710.49410.YahooMailNeo@web81405.mail.mud.yahoo.com>

I am looking for a black wrinkle shroud for an ARC-5---the box-like cover that fits over the tubes and IF transformers.

Anyone have one they would spare??

?

Joe

W5WBR

From wwatson5 at sbcglobal.net Thu Mar 1 18:42:11 2012  
From: wwatson5 at sbcglobal.net (William Watson)  
Date: Thu, 1 Mar 2012 15:42:11 -0800 (PST)  
Subject: [BoatAnchors] Fw: Looking for an ARC-5 Top Shroud (again)  
In-Reply-To: <1330644710.49410.YahooMailNeo@web81405.mail.mud.yahoo.com>  
References: <1330644710.49410.YahooMailNeo@web81405.mail.mud.yahoo.com>  
Message-ID: <1330645331.21261.YahooMailNeo@web81405.mail.mud.yahoo.com>

I should have said ARC-5 receiver.

?

Joe

----- Forwarded Message -----

From: William Watson <wwatson5 at sbcglobal.net>  
To: "boatanchors at theporch.com" <boatanchors at theporch.com>  
Sent: Thursday, March 1, 2012 5:31 PM  
Subject: [BoatAnchors] Looking for an ARC-5 Top Shroud

I am looking for a black wrinkle shroud for an ARC-5---the box-like cover that fits over the tubes and IF transformers.

Anyone have one they would spare??

?

Joe

W5WBR

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BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From infomet at embarqmail.com Fri Mar 2 22:38:42 2012  
From: infomet at embarqmail.com (Wilson Lamb)  
Date: Fri, 2 Mar 2012 22:38:42 -0500  
Subject: [BoatAnchors] Fw: 431 Pilot Lamp Needed  
Message-ID: <0E180AE0F74A479E8923915224B3DAC0@wilsonspc>

> Anyone have any 431 lamps? 14V, .25A, globe shaped glass.  
> Thanks,  
> Wilson  
> W4BOH

From artleb at earthlink.net Sun Mar 4 15:56:50 2012  
From: artleb at earthlink.net (Art Lebermann)  
Date: Sun, 4 Mar 2012 12:56:50 -0800  
Subject: [BoatAnchors] Need manual for RCA WR-52A FM Stereo test gen.  
Message-ID: <380-22012304205650706@earthlink.net>

Does anyone have a manual (or copy) for the RCA WR-52A Stereo FM Signal Simulator?

Thanks!  
Art Lebermann  
W6REQ

From gumbear at pacbell.net Sun Mar 4 17:54:12 2012  
From: gumbear at pacbell.net (Arden Allen)  
Date: Sun, 4 Mar 2012 14:54:12 -0800  
Subject: [BoatAnchors] Need manual for RCA WR-52A FM Stereo test gen.  
References: <380-22012304205650706@earthlink.net>  
Message-ID: <001301ccfa5d\$82b9d0e0\$199f480c@KB6NAX>

Tucker has one:

<http://www.etestmanuals.com/Search.aspx?Mfg=RCA>

Arden Allen  
KB6NAX

If you pick up a starving dog and make him prosperous, he will not bite you. This is the principle difference between a dog and a man. -Mark Twain

> Does anyone have a manual (or copy) for the RCA WR-52A Stereo FM Signal Simulator?

Thanks!  
Art Lebermann  
W6REQ

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BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From arc5 at ix.netcom.com Wed Mar 7 10:24:48 2012  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Wed, 7 Mar 2012 09:24:48 -0600  
Subject: [BoatAnchors] WTD: Paper Instructiograph Tapes.  
Message-ID: <F3791528059D4C8FA0AC9150F95BCAA7@DaddyPC>

WTD:  
Paper Instructiograph Tapes.  
The black-box code trainer with which many of us are familiar.  
Looking for Continental Code tapes 1, 9, 11, 12 and 15+.  
Thanks,  
Dave S.

From wwatson5 at sbcglobal.net Wed Mar 7 19:28:14 2012  
From: wwatson5 at sbcglobal.net (William Watson)  
Date: Wed, 7 Mar 2012 16:28:14 -0800 (PST)  
Subject: [BoatAnchors] Would like to trade Collins S-Line cabinets  
Message-ID: <1331166494.2766.YahooMailNeo@web81403.mail.mud.yahoo.com>

I have a brand new full width Collins S-line cabinet that is 11" deep that I would like to trade for a new or used (even if it needs some "body work") 13" deep cabinet.  
I need it for my 30L-1 amplifier.? I would trade even.  
?  
Joe  
W5WBR

From 4cx250b at muohio.edu Thu Mar 8 22:37:42 2012

From: 4cx250b at muohio.edu (Jim Garland)  
Date: Thu, 8 Mar 2012 20:37:42 -0700  
Subject: [BoatAnchors] Question, re high voltage wire  
Message-ID: <D7E44446AB04434D8D3256DF344A31B7@JimsOffice>

I'm wiring up an HV power supply and wonder if somebody can elucidate me about high voltage cable. I have a spool of red "cathode ray tube" cable, rated at 25KV that I've used in the past. It has a red PVC jacket, which surrounds polyethylene insulation that is about the thickness as that on RG59 coax. The conductor is about the same diameter as the conductor in RG58 or RG59 coax, except that it has a graphite foil wrapped around it.

So my questions are (1) what is the purpose of the graphite foil, and (2) why is the voltage breakdown rating of the wire so much higher than that for RG58 or RG59 coax (about a factor of ten higher)?

Actually, I'll probably not use this cable, because it is quite stiff. Instead, I'm planning on using stranded test probe wire (.14 in diameter) which has silicone insulation and is rated at 10KV. It is much more flexible and easier to dress.

73,

Jim W8ZR

From w9ac at arrl.net Fri Mar 9 08:25:21 2012  
From: w9ac at arrl.net (Paul Christensen)  
Date: Fri, 9 Mar 2012 08:25:21 -0500  
Subject: [BoatAnchors] Question, re high voltage wire  
References: <25632F56A58646F1A4EB88ECE2FA3202@DBTOA000>  
Message-ID: <001201cccfdf8\$152d9f90\$1d3ca8c0@office>

Jim,

As I recall, the foil is used to retard the effects of corona when used at really high HV levels like the type encountered with a CRT. We've probably all witnessed excessive dust collection around the CRT lead of old TV sets. Under the outer PVC jacket is probably FEP insulation or a variant.

Twenty years ago, I purchased an Alpha 77D (older than the Dx model). The prior owner had changed out all the HV wiring to the type you describe. I had a hard time working with it, so I replaced it with the original

silicone-jacketed HV wire used by the folks at Alpha.

There are several variants of silicone HV wire, but the best appears to be a silicone outer jacket on an FEP layer with a micro-stranded conductor. That type of wire is extremely flexible and easy to use in amp construction projects.

How about some pre-release pictures of the new amp? :-)

Paul, W9AC

> ----- Original Message -----

> From: "Jim Garland" <4cx250b at muohio.edu>

> To: "'Boatanchors List'" <boatanchors at theporch.com>

> Sent: Thursday, March 08, 2012 10:37 PM

> Subject: [BoatAnchors] Question, re high voltage wire

>

>

>> I'm wiring up an HV power supply and wonder if somebody can elucidate me  
>> about high voltage cable. I have a spool of red "cathode ray tube" cable,  
>> rated at 25KV that I've used in the past. It has a red PVC jacket, which  
>> surrounds polyethylene insulation that is about the thickness as that on  
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>>

>>

>>

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>>

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>> Instead, I'm planning on using stranded test probe wire (.14 in diameter)  
>> which has silicone insulation and is rated at 10KV. It is much more  
>> flexible

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>>

>> 73,

>>

>> Jim W8ZR

>>

>> -----

>> BoatAnchors mailing list

>> BoatAnchors at theporch.com

>> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>

From artleb at earthlink.net Sat Mar 10 02:16:48 2012  
From: artleb at earthlink.net (Art Lebermann)  
Date: Fri, 9 Mar 2012 23:16:48 -0800  
Subject: [BoatAnchors] Need info on E.M. Sargent receiver  
Message-ID: <380-22012361071648218@earthlink.net>

I'm looking for a schematic - and any other info - on an E.M. Sargent model 51-MK (or 51-AK) receiver. The 51-AK was a 5-band receiver, and the 51-MK had two additional LF bands for marine service. These sets were built between 1938 and 1940. There is a listing in Moore's "Communications Receivers", but I've not found any other references.

Art Lebermann  
W6REQ

From navy.radio at gmail.com Sat Mar 10 20:57:05 2012  
From: navy.radio at gmail.com (Nick England)  
Date: Sat, 10 Mar 2012 20:57:05 -0500  
Subject: [BoatAnchors] plate relay question  
Message-ID: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBcKZEQasxNaw@mail.gmail.com>

I need to build something that runs a relay off 450-500vdc through an appropriate dropping resistor.  
I've got several possible relays on hand with coil resistance 10K-20K  
So what voltage should I run these at - how big is my dropping resistor?

For example, one pulls in around 75v - should I run it at 75v, 100v, 150v ?  
i.e. how can you tell what is the correct current?

Anyone got specs on a COMAR C-6888 relay?

cheers,  
Nick K4NYW

From 4cx250b at muohio.edu Sat Mar 10 21:35:45 2012

From: 4cx250b at muohio.edu (Jim Garland)  
Date: Sat, 10 Mar 2012 19:35:45 -0700  
Subject: [BoatAnchors] plate relay question  
In-Reply-To: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBcKZEQasxNaw@mail.gmail.com>  
References: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBcKZEQasxNaw@mail.gmail.com>  
Message-ID: <AA16F4CED87346298BEDF85F8BAA0A03@JimsOffice>

Hi Nick,  
Let's say your relay is 10,000 ohms and pulls in at 75VDC, and your power supply is 450VDC. For the relay to pull in reliably, let's assume we'll operate it at 100VDC. Then the current it draws is  $100V/10,000\text{ohms} = .01A = 10\text{mA}$ . Your dropping resistor would then have to drop  $(450V-100V)=350V$ , at a current of 10mA. Thus the dropping resistor should be  $350V/.01A=35,000$  ohms. The power dissipated in the dropping resistor is  $(350V)\times(.01A)=3.5\text{Watts}$ . A 5W resistor (or larger) would do the trick.  
73,  
Jim W8ZR

> -----Original Message-----  
> From: boatanchors-bounces at theporch.com  
[mailto:boatanchors-bounces at theporch.com]  
> On Behalf Of Nick England  
> Sent: Saturday, March 10, 2012 6:57 PM  
> To: Old Tube Radios  
> Subject: [BoatAnchors] plate relay question  
>  
> I need to build something that runs a relay off 450-500vdc through an  
> appropriate dropping resistor.  
> I've got several possible relays on hand with coil resistance 10K-20K  
> So what voltage should I run these at - how big is my dropping resistor?  
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> For example, one pulls in around 75v - should I run it at 75v, 100v, 150v  
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> i.e. how can you tell what is the correct current?  
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> Anyone got specs on a COMAR C-6888 relay?  
>  
> cheers,  
> Nick K4NYW  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From k4oah at mindspring.com Sat Mar 10 22:16:30 2012  
From: k4oah at mindspring.com (Garey Barrell)

Date: Sat, 10 Mar 2012 22:16:30 -0500  
Subject: [BoatAnchors] plate relay question  
In-Reply-To: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBcKZEQasxNaw@mail.gmail.com>  
References: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBcKZEQasxNaw@mail.gmail.com>  
Message-ID: <4F5C190E.6060805@mindspring.com>

Nick -

One way to approach it in lieu of specifications is to apply a variable voltage and increase voltage until it just pulls in. Measure CURRENT through the coil, add 20%, and then calculate your supply for that current.

73, Garey - K40AH  
Glen Allen, VA

Drake 2-B, 2-C/2-NT, 4-A, 4-B, C-Line  
and TR-4/C Service Supplement CDs  
<www.k4oah.com>

Nick England wrote:

> I need to build something that runs a relay off 450-500vdc through an  
> appropriate dropping resistor.  
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>  
> Anyone got specs on a COMAR C-6888 relay?  
>  
> cheers,  
> Nick K4NYW  
>

From bill at iaxs.net Sat Mar 10 23:07:22 2012  
From: bill at iaxs.net (Bill Hawkins)  
Date: Sat, 10 Mar 2012 22:07:22 -0600  
Subject: [BoatAnchors] plate relay question  
In-Reply-To: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBcKZEQasxNaw@mail.gmail.com>  
References: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBcKZEQasxNaw@mail.gmail.com>  
Message-ID: <EE40EBEC038A4548B98A731C3F9EDAE4@cyrus>

Hi, Nick



I've found silver plated contacts to be best. IBM once made silver contact relays for the relay logic in their machines, like the 029 card punch.

Wait - you're looking for a relay driven by the plate current of a tube.

The relay magnetic circuit is exquisitely sensitive to average current. Rather than waste energy in a dropping resistor, add a multivibrator using an appropriate twin triode. Adjust the "on" time of the triode with the relay in its plate circuit to provide the correct average current to the relay coil.

If millisecond drop-out response is not critical, use a silicon diode to absorb the back current when the triode turns off. This will increase the average current and allow you to decrease the "on" time of the triode.

If it is critical, say for keying, use an RC snubber across the coil, with values for R and C determined empirically. R may be the coil resistance for critical damping, with C large enough to allow R to damp the flyback current.

There is a great deal of relay lore that has been lost in the shifting sands of solid state electronics. BA is a last bastion.

Tongue somewhat in cheek,  
Bill Hawkins

-----Original Message-----

From: boatanchors-bounces at theporch.com  
[mailto:boatanchors-bounces at theporch.com] On Behalf Of Nick England  
Sent: Saturday, March 10, 2012 7:57 PM  
To: Old Tube Radios  
Subject: [BoatAnchors] plate relay question

I need to build something that runs a relay off 450-500vdc through an appropriate dropping resistor.  
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Nick K4NYW

-----

BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From navy.radio at gmail.com Sun Mar 11 08:37:42 2012  
From: navy.radio at gmail.com (Nick England)  
Date: Sun, 11 Mar 2012 08:37:42 -0400  
Subject: [BoatAnchors] plate relay question  
In-Reply-To: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBckZEQasxNaw@mail.gmail.com>  
References: <CAB55hNd5ptL86Tq1PSpnhEk=Ws+\_PTC+ENHLPiBckZEQasxNaw@mail.gmail.com>  
Message-ID: <11E04284-D2E5-4E62-A08D-53F29D54C2D4@gmail.com>

Thanks for the replies gang. A rule-of-thumb based on experience was exactly what I needed. Seems like the consensus is that when using an unmarked junkbox relay, operating around 125% of pull-in current is a reasonable value for reliable operation and coil life.

Many thanks for the help, friends.

Nick K4NYW

p.s. This little project is so that I won't have to flip 4 switches and plug/unplug two RF jumpers to go from transmit to receive.

From navy.radio at gmail.com Sun Mar 11 09:52:47 2012  
From: navy.radio at gmail.com (Nick England)  
Date: Sun, 11 Mar 2012 09:52:47 -0400  
Subject: [BoatAnchors] Charlotte NC hamfest photos  
Message-ID: <CAB55hNeTq341Jf8hty0bEMWgtUBZ-0zTtvr8P2eYkuypPBrf1Q@mail.gmail.com>

FYI, some boatanchor photos from the Charlotte NC hamfest yesterday - pretty good fest and it was fun to see BA friends as always.

cheers,

Nick K4NYW

<http://www.virhistory.com/ham/clt-12.htm>

From k4oah at mindspring.com Sun Mar 11 17:24:32 2012  
From: k4oah at mindspring.com (Garey Barrell)  
Date: Sun, 11 Mar 2012 17:24:32 -0400  
Subject: [BoatAnchors] [Drakelist] FS: Unique Drake Service Supplement CDs  
Message-ID: <4F5D1810.30707@mindspring.com>

Here is the information that Drake left out of their manuals!

Unique supplemental service information CDs available for the Drake TR-4, TR-4C/Cw/CwRIT, A, B and C

Lines, 2-C / 2-NT and the 2-B receiver.

High resolution color photos of the under chassis and individual PC boards of each unit, with all parts identified and keyed to a parts list make it easy to locate any component. No more trying to trace wires through bundles, etc. This information is not available elsewhere and really makes a difference in servicing these units.

These CDs are NOT just scans of the original manuals that were included with the equipment when new.

High resolution scans of the original manuals ARE on the CDs, along with scans of manuals for associated equipment such as the C-4, FS-4, MN2000, L-4B, W-4, etc.

Samples of these pages (at reduced resolution) and purchase information are at <[www.k4oah.com](http://www.k4oah.com)>.

--

73, Garey - K40AH  
Glen Allen, VA

From knjhanlon at msn.com Sun Mar 11 18:45:05 2012  
From: knjhanlon at msn.com (JAMES HANLON)  
Date: Sun, 11 Mar 2012 16:45:05 -0600  
Subject: [BoatAnchors] Relay Question  
Message-ID: <SNT106-W2572CBE8C86822CDF8D4DEA05A0@phx.gbl>

Nick,

You have gotten good advice about how to drive your relay. When calculating that series resistor, be sure to include the voltage drop across your driving tube. You may have to measure that empirically unless you have some characteristic curves for the tube. But for example if there turns out to be 50 volts across the tube, subtract that from the total power supply voltage and then do your Ohms Law calculation for the series resistor.

One other piece of advice you have received is very important. Connect a diode across the relay coil in such a way that is reverse-biased when the relay is turned on. The reverse breakdown voltage of the diode should be larger than the voltage across the relay coil when the relay is actuated. The diode will be off when the relay is actuated, and it will turn on when the relay is released and provide a path for the relay coil current to decay through it. If you don't have

the diode, or some other path for the coil current to decay through, then the voltage across the relay coil on turn-off will build up instantaneously to whatever it has to to cause a path for the current to flow. That could easily be thousands of volts. It could arc across the coil itself or through some other elements of the circuit. The mathematical description of the situation is  $V = L \frac{di}{dt}$ , where  $V$  is the voltage across the inductor (relay coil),  $L$  is the inductance of that coil, and  $\frac{di}{dt}$  is the time rate of change of the current through the coil. If you attempt to interrupt the current abruptly, the time rate of change of the current goes to infinity and thus the voltage across the coil does too. The diode will increase the turn-off time of the relay slightly, something less than one millisecond is typical for most relays.

Jim, W8KGI

From wb0eq at yahoo.com Mon Mar 12 12:03:35 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Mon, 12 Mar 2012 09:03:35 -0700 (PDT)  
Subject: [BoatAnchors] Hamfest pix  
Message-ID: <1331568215.12414.YahooMailNeo@web45605.mail.sp1.yahoo.com>

Drove all the way to west coast to Puyallup hamfest (1.5 days travel).

Rarest thing there was a Central Electronics 100.

For BA's, the Charlotte NC hamfest (see below) was much better!

Thanks Nick for posting pix.? Lots of great stuff.

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

FYI, some boatanchor photos from the Charlotte NC hamfest yesterday - pretty good fest and it was fun to see BA friends as always.  
cheers,

Nick K4NYW

<http://www.virhistory.com/ham/clt-12.htm>

From ddillman at igc.org Tue Mar 13 21:58:02 2012  
From: ddillman at igc.org (Richard Dillman)  
Date: Tue, 13 Mar 2012 18:58:02 -0700 (GMT-07:00)  
Subject: [BoatAnchors] Drake 2B Has Arrived  
Message-ID: <31407222.1331690282543.JavaMail.root@elwamui-rubis.atl.sa.earthlink.net>

The FexEx guy braved the teeth of the storm and those of Luigi to deliver a Drake 2B receiver and companion speaker today. They were donated to the MRHS by Mark Starin/K1RMC of Manchester, NH. The 2B was used as a keying monitor at KPH by such luminaries as Ray Smith and Les Berger as several photos at the link below will show.

<http://tinyurl.com/87kh8ou>

The receiver works great. I like the smooth sound and low noise level. See the attached photo.

RD

=====  
Richard Dillman, WPE2VT  
Chief Operator, Coast Station KSM  
Maritime Radio Historical Society  
<http://www.radiomarine.org>  
=====

From da.stoops at sbcglobal.net Tue Mar 13 22:27:45 2012  
From: da.stoops at sbcglobal.net (Denice Stoops)  
Date: Tue, 13 Mar 2012 19:27:45 -0700  
Subject: [BoatAnchors] [Radiomarine] Re: Drake 2B Has Arrived [1 Attachment]  
References: <31407222.1331690282543.JavaMail.root@elwamui-rubis.atl.sa.earthlink.net>  
Message-ID: <8CC610BD76C2497DAE036860EC3000F6@DENICE>

i remember using one of those too!

88/da

----- Original Message -----  
From: Richard Dillman  
To: billruck at earthlink.net ; shawes at berkeley.edu ; paul at paulshinn.us ;  
mpayne at camarin.org ; puffin at horizoncable.com ; Jack Martini ; RCARAY at  
aol.com ; Radiomarine ; Boatanchors  
Sent: Tuesday, March 13, 2012 6:58 PM  
Subject: [Radiomarine] Re: Drake 2B Has Arrived [1 Attachment]

[Attachment(s) from Richard Dillman included below]

The FedEx guy braved the teeth of the storm and those of Luigi to deliver a Drake 2B receiver and companion speaker today. They were donated to the MRHS by Mark Starin/K1RMC of Manchester, NH. The 2B was used as a keying monitor at KPH by such luminaries as Ray Smith and Les Berger as several photos at the link below will show.

<http://tinyurl.com/87kh8ou>

The receiver works great. I like the smooth sound and low noise level. See the attached photo.

RD

=====  
Richard Dillman, WPE2VT  
Chief Operator, Coast Station KSM  
Maritime Radio Historical Society  
<http://www.radiomarine.org>  
=====

--'-'-'---  
Attachment(s) from Richard Dillman

1 of 1 Photo(s)

Drake 2B 004b.jpg  
Reply to sender | Reply to group | Reply via web post | Start a New Topic  
Messages in this topic (1)  
Recent Activity:  
Visit Your Group

The Radiomarine list brings you information about the on-the-air activities of the Maritime Radio Historical Society including stations KPH, KSM and K6KPH. For more information see our Web site at:

<http://www.radiomarine.org>

VY 73,

MRHS

Switch to: Text-Only, Daily Digest ? Unsubscribe ? Terms of Use.

--'-'-'---

From johnmb at nc.rr.com Wed Mar 14 19:01:58 2012  
From: johnmb at nc.rr.com (john)  
Date: Wed, 14 Mar 2012 19:01:58 -0400

Subject: [BoatAnchors] [Radiomarine] Re: Drake 2B Has Arrived [1  
Attachment]  
In-Reply-To: <31407222.1331690282543.JavaMail.root@elwamui-rubis.atl.sa.  
earthlink.net>  
References: <31407222.1331690282543.JavaMail.root@elwamui-  
rubis.atl.sa.earthlink.net>  
Message-ID: <6.2.1.2.2.20120314185616.03b8b310@pop-server.nc.rr.com>

Hello Mr D,

You did well with that. The 2B is a very capable CW receiver, and its performance is belied by the small simple box it's in.

My primary nits with it are the wonky slide switches which don't generally age well, and the tuning seems to me a bit fast. Once calibrated, the dial skirt graduations when indexed to the main dial are actually pretty accurate and useful.

One of the 2B's I've owned had 2 Jackson drives seriesed (ala HW101), which provided a more useful tuning rate, but was a mechanical dogs breakfast and was removed.

Now...can you copy traffic with it.... :-)

73  
John K5MO

At 09:58 PM 3/13/2012, Richard Dillman wrote:

><\*>[Attachment(s) from Richard Dillman included below]

>

>

>The FexEx guy braved the teeth of the storm and those of Luigi to deliver  
>a Drake 2B receiver and companion speaker today. They were donated to the  
>MRHS by Mark Starin/K1RMC of Manchester, NH. The 2B was used as a keying  
>monitor at KPH by such luminaries as Ray Smith and Les Berger as several  
>photos at the link below will show.

>

><http://tinyurl.com/87kh8ou>

>

>The receiver works great. I like the smooth sound and low noise  
>level. See the attached photo.

>

>RD

>

>=====

>Richard Dillman, WPE2VT  
>Chief Operator, Coast Station KSM  
>Maritime Radio Historical Society  
><http://www.radiomarine.org>  
>=====

>  
><\*>Attachment(s) from Richard Dillman:  
>  
><\*> 1 of 1 Photo(s)  
><http://groups.yahoo.com/group/Radiomarine/attachments/folder/1095805069/item/list>  
>  
> <\*> Drake 2B 004b.jpg  
>  
>-----

>  
>  
>  
>The Radiomarine list brings you information about the on-the-air  
>activities of the Maritime Radio Historical Society including stations  
>KPH, KSM and K6KPH. For more information see our Web site at:  
>  
> <http://www.radiomarine.org>  
>  
>VY 73,  
>  
>MRHSYahoo! Groups Links  
>  
><\*> To visit your group on the web, go to:  
> <http://groups.yahoo.com/group/Radiomarine/>  
>  
><\*> Your email settings:  
> Individual Email | Traditional  
>  
><\*> To change settings online go to:  
> <http://groups.yahoo.com/group/Radiomarine/join>  
> (Yahoo! ID required)  
>  
><\*> To change settings via email:  
> Radiomarine-digest at [yahoogroups.com](mailto:yahoogroups.com)  
> Radiomarine-fullfeatured at [yahoogroups.com](mailto:yahoogroups.com)  
>  
><\*> To unsubscribe from this group, send an email to:  
> Radiomarine-unsubscribe at [yahoogroups.com](mailto:yahoogroups.com)  
>  
><\*> Your use of Yahoo! Groups is subject to:  
> <http://docs.yahoo.com/info/terms/>



From ddillman at igc.org Wed Mar 14 20:05:08 2012  
From: ddillman at igc.org (Richard Dillman)  
Date: Wed, 14 Mar 2012 17:05:08 -0700 (GMT-07:00)  
Subject: [BoatAnchors] West Coast Qualifying Run from K6KPH  
Message-ID: <3974689.1331769908227.JavaMail.root@elwamui-rubis.atl.sa.earthlink.net>

As many know, K6KPH is the west coast outlet for the ARRL Morse code qualifying run. The next qualifying run will take place this Saturday 17 March. The MRHS Transmitter Department will seize control of the K6KPH transmitters about 30 minutes before the beginning of the run to shift them to the ARRL frequencies. Thus normal contact with K6KPH will be unavailable during the time of the qualifying run and for a short period before and after. Here are the details:

Date/time: March 17 2100z (Sat Mar 17 2 PM Pacific time)

Speeds: 10-35 wpm

Frequencies: 3581.5, 7047.5, 14047.5, 18097.5, 21067.5

For more about the qualifying run see the ARRL Web site:

<http://www.arrl.org/qualifying-run-schedule>

RD

=====  
Richard Dillman, WPE2VT  
Chief Operator, Coast Station KSM  
Maritime Radio Historical Society  
<http://www.radiomarine.org>  
=====

From arc5 at ix.netcom.com Thu Mar 15 14:48:41 2012  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Thu, 15 Mar 2012 13:48:41 -0500  
Subject: [BoatAnchors] "Command Set" vs. "Liaison Set"  
Message-ID: <FD757BB172544533B489F55B66095F73@DaddyPC>

Re: WWII Aircraft Radio "Command Set" vs. "Liaison Set"

We assume everyone knows this, but I've recently gotten two requests for this information. New members do come along and we should not take them for granted. So, copied here for general information:

The WWII Aircraft "Command Set" mission was to be used by the pilot/copilot both to send/receive commands and information to the rest of the aircraft in the flight and also to talk with control towers / ground controllers. The Radio Op set them up at the start of the flight and, as long as there was no malfunction or loss of his "Liaison" set (SCR-287, AN/ARC-8 etc.), did not mess with or use them; they were for the pilots. Command Sets were used on CW only in an emergency when phone wasn't possible, or when the Liaison set had been knocked-out or, in a fighter, to "lock down" the CW key so the ground could take a directional bearing- a function provided by a Liaison set in a larger aircraft.

The "Liaison" set (BC-375, ARC-13, GP-7 and associated receivers etc.) were used by the Radio Operator to communicate with headquarters, send strike reports, get/send weather reports, take radio bearings, answer and/or send distress reports- in short, all the radio stuff that the pilots and nava-guessers didn't mess with. Liaison sets were rarely used on AM.

Late in the war when the AN/ARC-8 was more widely installed, the line between the two sets began to "blur" and you start to see a "pilot's control box" that selects air/ground channels on the ART-13 for the pilot to use. This was quite late in WWII; for most of the war, the distinction between the two sets held.

Take care of yourself,  
73 DE Dave AB5S

From thompson at mindspring.com Thu Mar 15 21:40:15 2012  
From: thompson at mindspring.com (David Thompson)  
Date: Thu, 15 Mar 2012 21:40:15 -0400  
Subject: [BoatAnchors] Call Book Lookup  
Message-ID: <008e01cd0315\$bd32c4f0\$775d4d0c@yourxb2x7j77gn>

My oldest call book is Winter 1958. I need to trace down Bob King, W0SUF. He now lives in the Houma, LA area.

I need a look up in any early 1950's or late 40's call book.

Thanks 73

Dave K4JRB

From w7qho at aol.com Thu Mar 15 22:01:00 2012  
From: w7qho at aol.com (mac)  
Date: Thu, 15 Mar 2012 19:01:00 -0700  
Subject: [BoatAnchors] Call Book Lookup  
In-Reply-To: <008e01cd0315\$bd32c4f0\$775d4d0c@yourxb2x7j77gn>  
References: <008e01cd0315\$bd32c4f0\$775d4d0c@yourxb2x7j77gn>  
Message-ID: <263533C9-3F46-4677-A357-676F5070B884@aol.com>

Not listed in the Spring 1947 Call Book.

Dennis D. W7QH0  
Glendale, CA

\*\*\*\*\*

On Mar 15, 2012, at 6:40 PM, David Thompson wrote:

> My oldest call book is Winter 1958. I need to trace down Bob King,  
> W0SUF. He now lives in the Houma, LA area.  
>  
> I need a look up in any early 1950's or late 40's call book.  
>  
> Thanks 73  
> Dave K4JRB  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From w7qho at aol.com Thu Mar 15 22:05:27 2012  
From: w7qho at aol.com (mac)  
Date: Thu, 15 Mar 2012 19:05:27 -0700  
Subject: [BoatAnchors] Call Book Lookup  
In-Reply-To: <008e01cd0315\$bd32c4f0\$775d4d0c@yourxb2x7j77gn>  
References: <008e01cd0315\$bd32c4f0\$775d4d0c@yourxb2x7j77gn>  
Message-ID: <B5CFFA8E-4C15-4D59-9CBB-ED3D60A40918@aol.com>

Not listed in Fall 1955 either. :^(

Dennis D. W7QH0  
Glendale, CA

\*\*\*\*\*

On Mar 15, 2012, at 6:40 PM, David Thompson wrote:

> My oldest call book is Winter 1958. I need to trace down Bob King,  
> W0SUF. He now lives in the Houma, LA area.  
>  
> I need a look up in any early 1950's or late 40's call book.  
>  
> Thanks 73  
> Dave K4JRB  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From ken at w2krh.com Thu Mar 15 23:20:27 2012

From: ken at w2krh.com (Ken Hall)

Date: Thu, 15 Mar 2012 23:20:27 -0400

Subject: [BoatAnchors] Call Book Lookup

Message-ID: <4F62B17B.9020203@w2krh.com>

Dave,

You may want to ask the Antique Wireless Association, Google them. They have most of the old call books in their library.

73,  
Ken  
W2KRH

On 3/15/2012 10:01:00 PM, mac (w7qho at aol.com) wrote:

> Not listed in the Spring 1947 Call Book.  
>  
> Dennis D. W7QHO  
> Glendale, CA  
>  
> \*\*\*\*\*  
> On Mar 15, 2012, at 6:40 PM, David Thompson wrote:  
>  
> > My oldest call book is Winter 1958. I need to trace  
down Bob King,  
> > W0SUF. He now lives in the Houma, LA area.  
> >

> > I need a look up in any early 1950's or late 40's call  
book.  
> >  
> > Thanks 73  
> > Dave K4JRB  
> >  
> > -----  
> > BoatAnchors mailing list  
> > BoatAnchors at theporch.com  
> > <https://minime.theporch.com/mailman/listinfo/boatanchors>  
> >  
> > -----  
> > BoatAnchors mailing list  
> > BoatAnchors at theporch.com  
> > <https://minime.theporch.com/mailman/listinfo/boatanchors>  
> >  
> >  
> > -----  
> > No virus found in this message.  
> > Checked by AVG - [www.avg.com](http://www.avg.com)  
> > Version: 2012.0.1913 / Virus Database: 2114/4873 -  
Release Date: 03/15/12

--

From K8MFO at aol.com Fri Mar 16 20:14:33 2012  
From: K8MFO at aol.com (K8MFO at aol.com)  
Date: Fri, 16 Mar 2012 20:14:33 -0400 (EDT)  
Subject: [BoatAnchors] Call Book Lookup  
Message-ID: <3cad2.4fe0174d.3c953169@aol.com>

Dave ... old MDX !!

Here is a listing from my Spring 1949 call book ...

W0SUF  
Robert G. King  
223 East Broadway  
Hoisington, Kansas

Hope this helps.

73

Don - K8MFO

In a message dated 3/16/2012 8:07:23 P.M. Eastern Daylight Time,  
ken at w2krh.com writes:

Dave,

You may want to ask the Antique Wireless Association, Google  
them. They have most of the old call books in their library.

73,  
Ken  
W2KRH

On 3/15/2012 10:01:00 PM, mac (w7qho at aol.com) wrote:

```
> Not listed in the Spring 1947 Call Book.
>
> Dennis D. W7QHO
> Glendale, CA
>
> *****
> On Mar 15, 2012, at 6:40 PM, David Thompson wrote:
>
> > My oldest call book is Winter 1958. I need to trace
down Bob King,
> > W0SUF. He now lives in the Houma, LA area.
> >
> > I need a look up in any early 1950's or late 40's call
book.
> >
> > Thanks 73
> > Dave K4JRB
> >
> > -----
> > BoatAnchors mailing list
> > BoatAnchors at theporch.com
> > https://minime.theporch.com/mailman/listinfo/boatanchors
>
>
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
```

> Version: 2012.0.1913 / Virus Database: 2114/4873 -  
Release Date: 03/15/12

--

-----  
BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From K8MFO at aol.com Fri Mar 16 20:18:23 2012  
From: K8MFO at aol.com (K8MFO at aol.com)  
Date: Fri, 16 Mar 2012 20:18:23 -0400 (EDT)  
Subject: [BoatAnchors] W0SUF Listing for K4JRB  
Message-ID: <cb26.736678ab.3c95324f@aol.com>

Dave ... old MDX !!

Here is a listing from my Spring 1949 call book ...

W0SUF  
Robert G. King  
223 East Broadway  
Hoisington, Kansas

Hope this helps.

73

Don - K8MFO

From arc5 at ix.netcom.com Sat Mar 17 22:15:56 2012  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Sat, 17 Mar 2012 21:15:56 -0500  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
Message-ID: <28449721637B4D78B9942D21DFDCE826@DaddyPC>

I'm resurrecting a National NC-100A.  
Sounds beautiful. Nice AM, BCB and SWL rig.  
One problem: our blasted 125 Volt AC power lines.  
This rig wants 110 volts and 125 is very tough on it.  
There is no room to hog-wire in a bucking transformer,  
so that's out. Niether can I dedicate a variac to running  
this receiver.

I understand one can use capacitors as an AC voltage divider by placing one in series with a leg of the transformer primary and one across the transformer primary.

How can a dummy who can barely do the math needed to number book pages determine what values to use to drop this primary voltage from 125 to 110? Or even if it will work?

Easy! He asks the dozens of people smarter than him on the mailing lists. Ain't that cool? ;-)

TNX ES 73 DE Dave AB5S

From elespe at lisco.com Sat Mar 17 22:37:45 2012  
From: elespe at lisco.com (Paul Kraemer)  
Date: Sat, 17 Mar 2012 21:37:45 -0500  
Subject: [BoatAnchors] [Boatanchors] OK Smart People: Capacitive Voltage Divider?  
References: <28449721637B4D78B9942D21DFDCE826@DaddyPC>  
Message-ID: <B3D2EE5EDF694D659AD300EB0304A4B0@ENGR2>

David

I would NOT recommend the capacitors  
A small filament transformer with secondary current rating as large as receiver line current is all that is required to make a buck transformer. Something like 12v 3a filament transformer would do that.  
And, it costs less and is smaller than the proper capacitors  
Paul K0UYA

----- Original Message -----

From: "David Stinson" <arc5 at ix.netcom.com>  
To: <milsurplus at mailman.qth.net>; <boatanchors at mailman.qth.net>; <boatanchors at theporch.com>  
Sent: Saturday, March 17, 2012 9:15 PM  
Subject: [Boatanchors] OK Smart People: Capacitive Voltage Divider?

> I'm resurrecting a National NC-100A.  
> Sounds beautiful. Nice AM, BCB and SWL rig.  
> One problem: our blasted 125 Volt AC power lines.  
> This rig wants 110 volts and 125 is very tough on it.  
> There is no room to hog-wire in a bucking transformer,  
> so that's out. Niether can I dedicate a variac to running  
> this receiver.



> I understand one can use capacitors as an  
> AC voltage divider by placing one in series with  
> a leg of the transformer primary and one across the  
> transformer primary.  
>  
> How can a dummy who can barely do the math  
> needed to number book pages determine what  
> values to use to drop this primary voltage from  
> 125 to 110? Or even if it will work?  
> Easy! He asks the dozens of people  
> smarter than him on the mailing lists.  
> Ain't that cool? ;-)  
>  
> TNX ES 73 DE Dave AB5S  
>  
> -----  
> Boatanchors mailing list  
> Home: <http://mailman.qth.net/mailman/listinfo/boatanchors>  
> Help: <http://mailman.qth.net/mmfaq.htm>  
> Post: [mailto:Boatanchors at mailman.qth.net](mailto:Boatanchors@mailman.qth.net)  
>  
> List Administrator: Duane Fischer, W8DBF  
> \*\* For Assistance: [dfischer at usol.com](mailto:dfischer@usol.com) \*\*  
>  
>  
> This list hosted by: <http://www.qsl.net>  
> Please help support this email list: <http://www.qsl.net/donate.html>

From arc5 at ix.netcom.com Sat Mar 17 23:07:24 2012  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Sat, 17 Mar 2012 22:07:24 -0500  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
Message-ID: <752B8617C0F247C38157105AB30E9D5F@DaddyPC>

Thank you all for the suggestions and help with this.  
I think the external box with a bucking tranny is  
a splendid idea. I think I have just the tranny to  
buck-down the entire test bench.

Thanks again, ya'll. You're the best.

73 Dave S.

From harrison1 at comcast.net Sat Mar 17 23:42:15 2012

From: harrisonl at comcast.net (Lawrence T Harrison Jr)  
Date: Sat, 17 Mar 2012 23:42:15 -0400  
Subject: [BoatAnchors] Please change my email address  
Message-ID: <000501cd04b9\$1cd05a90\$56710fb0\$@net>

Please change my email address to k3jrr at shentel.net

Also you can upgrade my records:

New mailing address;

Lawrence T Harrison Jr K3JRR  
PO Box 38  
Criders, VA 22820

New phone number; 540-852-3431

I have updated QRZ if you need any additional information.

Larry Harrison

K3JRR

From ddillman at igc.org Sun Mar 18 14:36:27 2012  
From: ddillman at igc.org (Richard Dillman)  
Date: Sun, 18 Mar 2012 11:36:27 -0700 (GMT-07:00)  
Subject: [BoatAnchors] KSM/K6KPH On The Air Sunday  
Message-ID: <23843145.1332095787652.JavaMail.root@mswamui-billy.atl.sa.earthlink.net>

KSM and K6KPH are on the air today to test the possibility of Morse extending

operations to both Saturday and Sunday.

Operations began at 1115pdt (1815utc) and are expected to continue until 1600pdt (2300utc). Second op Mike Payne is at the key. In addition to monitoring ship calling frequencies Mike will be monitoring the K6KPH frequencies, primarily 14050kc and 21050kc. Give him a buzz, he'll appreciate it.

VY 73,

RD

=====  
Richard Dillman, WPE2VT  
Chief Operator, Coast Station KSM  
Maritime Radio Historical Society  
<http://www.radiomarine.org>  
=====

From spr at earthlink.net Sun Mar 18 17:13:08 2012  
From: spr at earthlink.net (Scott Robinson)  
Date: Sun, 18 Mar 2012 14:13:08 -0700  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
In-Reply-To: <28449721637B4D78B9942D21DFDCE826@DaddyPC>  
References: <28449721637B4D78B9942D21DFDCE826@DaddyPC>  
Message-ID: <4F664FE4.8010307@earthlink.net>

Hi Dave,

If you have a 12V filament transformer, you can do this trick easily. Two 6,3V transformers with the secondaries in series will work, too. Why not put the trannys in a box with a line cord and plug, external to the rx?

The capacitive method will work but will raise the line impedance, making the heater voltage vary some with B+ current drain, not a big deal but worth noticing. You might use a 10A transformer and feed a couple of outlet strips from it to power your whole BA station.

Peace,

Scott

On 3/17/12 7:15 PM, David Stinson wrote:  
> I'm resurrecting a National NC-100A. Sounds beautiful. Nice AM, BCB and  
> SWL rig.

> One problem: our blasted 125 Volt AC power lines.  
> This rig wants 110 volts and 125 is very tough on it.  
> There is no room to hog-wire in a bucking transformer,  
> so that's out. Niether can I dedicate a variac to running  
> this receiver. I understand one can use capacitors as an AC voltage  
> divider by placing one in series with a leg of the transformer primary  
> and one across the transformer primary.  
>  
> How can a dummy who can barely do the math needed to number book pages  
> determine what  
> values to use to drop this primary voltage from 125 to 110? Or even if  
> it will work?  
> Easy! He asks the dozens of people  
> smarter than him on the mailing lists.  
> Ain't that cool? ;-)  
>  
> TNX ES 73 DE Dave AB5S  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>

From gumbear at pacbell.net Sun Mar 18 20:52:02 2012  
From: gumbear at pacbell.net (Arden Allen)  
Date: Sun, 18 Mar 2012 17:52:02 -0700  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
References: <28449721637B4D78B9942D21DFDCE826@DaddyPC>  
<4F664FE4.8010307@earthlink.net>  
Message-ID: <000901cd056a\$84f344a0\$969d480c@KB6NAX>

Dave, go cheap. Your local auto parts emporium has loads of 12 volt ballasts at reasonable prices. You've guessed it, light bulbs. One, or two, or whatever in parallel, will drop your 125 volts down to where you want it and also add a teeny bit of voltage stabilization to boot. But I think Scott's bucking tranformer in an external box is the better way to go. 12 volt transformers abound on ePay.

Arden  
KB6NAX

On 3/17/12 7:15 PM, David Stinson wrote:

> I'm resurrecting a National NC-100A. Sounds beautiful. Nice AM, BCB and  
> SWL rig.  
> One problem: our blasted 125 Volt AC power lines.  
> This rig wants 110 volts and 125 is very tough on it.

> There is no room to hog-wire in a bucking transformer,  
> so that's out. Niether can I dedicate a variac to running  
> this receiver. I understand one can use capacitors as an AC voltage  
> divider by placing one in series with a leg of the transformer primary  
> and one across the transformer primary.  
>  
> How can a dummy who can barely do the math needed to number book pages  
> determine what  
> values to use to drop this primary voltage from 125 to 110? Or even if  
> it will work?  
> Easy! He asks the dozens of people  
> smarter than him on the mailing lists.  
> Ain't that cool? ;-)  
>  
> TNX ES 73 DE Dave AB5S  
.....

From kb8tad at gmail.com Mon Mar 19 00:53:34 2012  
From: kb8tad at gmail.com (Rich Post)  
Date: Mon, 19 Mar 2012 00:53:34 -0400  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
In-Reply-To: <752B8617C0F247C38157105AB30E9D5F@DaddyPC>  
References: <752B8617C0F247C38157105AB30E9D5F@DaddyPC>  
Message-ID: <CAEJr0FuckyMEe\_qdoU5mDHwsdxumT\_bhy\_idXmwKKkrfTmnpq@mail.gmail.com>

Hi Dave,

One cheap source of a bucking transformer is a dead UPS (uninterruptible power supply). These often have a hefty 12 to 14 volts center tapped transformer inside. They are often abandoned when the cost of a replacement gel cell nearly equals to cost of replacing the entire unit. The box also has a power cord, switch, and outlets which can easily be re-purposed as an all-in one bucking unit.

I have one UPS so modified as a potent bucking unit. I also modified another UPS with a second transformer in the battery compartment for a back-to-back isolation transformer. Cost of the UPS was a buck each at the local recycle place.

A second option addressing your original problem is just add a resistor in the B+ line to drop the B+ to a sane level. That will reduce the overall wattage consumption of the radio. In one case, I just used a 5Y3 (or type 80 for the NC-100) that tested as "weak" in the tube tester. That did the trick at reducing B+ and current consumption with no other changes.

A third option that is a slightly more drastic is to change the power supply to choke input. (Move the C-32 positive connection to the C-31 point). If a bit more hum results, just add a bit of capacitance to the output side of the choke. (C-32, C-31 and that additional cap to the same tie point.).

Best wishes,  
Rich KB8TAD

On Sat, Mar 17, 2012 at 11:07 PM, David Stinson <arc5 at ix.netcom.com> wrote:

> Thank you all for the suggestions and help with this.  
> I think the external box with a bucking tranny is a splendid idea. ?I think  
> I have just the tranny to buck-down the entire test bench.  
>  
> Thanks again, ya'll. ?You're the best.  
>  
> 73 Dave S.  
>  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From gumbear at pacbell.net Mon Mar 19 01:22:54 2012  
From: gumbear at pacbell.net (Arden Allen)  
Date: Sun, 18 Mar 2012 22:22:54 -0700  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
References: <752B8617C0F247C38157105AB30E9D5F@DaddyPC>  
<CAEJr0FuckyMEe\_qdoU5mDHwsdxumT\_bhy\_idXmwKKkrfTmnpqQ@mail.gmail.com>  
Message-ID: <001501cd0590\$5bb43a60\$be9d480c@KB6NAX>

Let's say the receiver sucks 100 watts out the wall.  $100W / 115V = 0.87A$ .  
You could get by with a 1 amp 12 volt filament transformer. A 2 amp  
filament transformer would give you lots of margin. That's all you need.

Arden Allen  
KB6NAX

> One cheap source of a bucking transformer is a dead UPS  
(uninterruptible power supply). These often have a hefty 12 to 14  
volts center tapped transformer inside. ....

From kd5byb at kd5byb.net Mon Mar 19 19:27:36 2012  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Mon, 19 Mar 2012 18:27:36 -0500  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
In-Reply-To: <CAEJr0FuckyMEe\_qdoU5mDHwsdxumT\_bhy\_idXmwKKkrfTmnpQ@mail.gmail.com>  
References: <752B8617C0F247C38157105AB30E9D5F@DaddyPC>  
<CAEJr0FuckyMEe\_qdoU5mDHwsdxumT\_bhy\_idXmwKKkrfTmnpQ@mail.gmail.com>  
Message-ID: <4F67C0E8.6070600@kd5byb.net>

Hi Rich and all,

In the past when I've played with UPS transformers, I've always found them to run extremely hot - even when operated at a mere fraction of what they should be rated at.

These were mostly APC brand. By chance, have you been using transformers from another brand?

thanks much,  
ben

On 3/18/2012 11:53 PM, Rich Post wrote:

> Hi Dave,  
>  
> One cheap source of a bucking transformer is a dead UPS  
> (uninterruptible power supply). These often have a hefty 12 to 14  
> volts center tapped transformer inside. They are often abandoned when  
> the cost of a replacement gel cell nearly equals to cost of replacing  
> the entire unit. The box also has a power cord, switch, and outlets  
> which can easily be re-purposed as an all-in one bucking unit.

From brianclarke01 at optusnet.com.au Mon Mar 19 19:33:15 2012  
From: brianclarke01 at optusnet.com.au (Brian Clarke)  
Date: Tue, 20 Mar 2012 10:33:15 +1100  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
References:  
<752B8617C0F247C38157105AB30E9D5F@DaddyPC><CAEJr0FuckyMEe\_qdoU5mDHwsdxumT\_bhy\_idXmwKKkrfTmnpQ@mail.gmail.com>  
<4F67C0E8.6070600@kd5byb.net>  
Message-ID: <9E44DDBF91A54B27BBBE2384DAE13053@WORKSHOP>

Transformers run hot under two main conditions:

1. when accountants have had a finger in the design
2. when you use a transformer designed for 60 Hz in a 50 Hz country.

If your transformer is running hot with no load, that means there is insufficient inductance to handle the magnetisation of the core - could be either of the two reasons I've given.

73 de Brian, VK2GCE.

On Tuesday, March 20, 2012 10:27 AM, Ben said:

> Hi Rich and all,  
>  
> In the past when I've played with UPS transformers, I've always found them  
> to run extremely hot - even when operated at a mere fraction of what they  
> should be rated at.  
>  
> These were mostly APC brand. By chance, have you been using transformers  
> from another brand?  
>  
> thanks much,  
> ben

From kd5byb at kd5byb.net Mon Mar 19 20:26:27 2012  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Mon, 19 Mar 2012 19:26:27 -0500  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
In-Reply-To: <9E44DDBF91A54B27BBBE2384DAE13053@WORKSHOP>  
References:  
<752B8617C0F247C38157105AB30E9D5F@DaddyPC><CAEJr0FuckyMEe\_qdoU5mDHWsdxumT\_bhY\_idXm  
wKKkrfTmnpCQ@mail.gmail.com>  
<4F67C0E8.6070600@kd5byb.net>  
<9E44DDBF91A54B27BBBE2384DAE13053@WORKSHOP>  
Message-ID: <4F67CEB3.8050802@kd5byb.net>

Hi Brian and all,

In my case, I think it was number 1. Ran cool with no load, but even with a 100VA load on a 400VA rated unit, it was getting hot. The UPS was only designed to run maybe 10 minutes, so who cares if the transformer got hot? :(

Thanks much and 73,  
ben, kd5byb

On 3/19/2012 6:33 PM, Brian Clarke wrote:



> Transformers run hot under two main conditions:  
> 1. when accountants have had a finger in the design  
> 2. when you use a transformer designed for 60 Hz in a 50 Hz country.  
>  
> If your transformer is running hot with no load, that means there is  
> insufficient inductance to handle the magnetisation of the core - could be  
> either of the two reasons I've given.

From kb8tad at gmail.com Mon Mar 19 21:03:55 2012  
From: kb8tad at gmail.com (Rich Post)  
Date: Mon, 19 Mar 2012 21:03:55 -0400  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
In-Reply-To: <4F67C0E8.6070600@kd5byb.net>  
References: <752B8617C0F247C38157105AB30E9D5F@DaddyPC>  
<CAEJr0FuckyMEe\_qdoU5mDHwsdxumT\_bhy\_idXmwKKkrfTmnpqQ@mail.gmail.com>  
<4F67C0E8.6070600@kd5byb.net>  
Message-ID: <CAEJr0Fv7eP-mHAUQTonkkRfivRPhsdt3PC8Da8sNniSMtghjXA@mail.gmail.com>

Hi Ben,

The one I have here is an APC 350 Back-UPS ES. No heating issues.  
Just double checked with my sensitive AC ammeter at no load. Barely  
moves the needle. I use that check as a rough test of saturation or  
loss. Transformers that pass the test stay cool.

When first testing it as a bucking solution about a year or so ago, I  
plugged my DeLonghi oil-filled heater into it, starting with the 600  
watt setting (acknowledging that in bucking mode, the actual heating  
would be about 10% less ). I then tried the 900 watt setting for a  
while. For a final test, I kicked in the full 1500 watts for a short  
time. Didn't seem to faze the transformer in the least. No unusual  
heating although I would obviously not keep it at the 1500 watt  
loading for any length of time.

Some UPS use the transformer for charging as well, often with a  
separate winding. Those are obviously meant to be powered  
continuously.

This may be a case of your mileage may vary.

73, Rich KB8TAD

On Mon, Mar 19, 2012 at 7:27 PM, Ben Hall <kd5byb at kd5byb.net> wrote:

> Hi Rich and all,  
>  
> In the past when I've played with UPS transformers, I've always found them  
> to run extremely hot - even when operated at a mere fraction of what they

> should be rated at.  
>  
> These were mostly APC brand. ?By chance, have you been using transformers  
> from another brand?  
>  
> thanks much,  
> ben  
>  
>  
>  
> On 3/18/2012 11:53 PM, Rich Post wrote:  
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>> volts center tapped transformer inside. ?They are often abandoned when  
>> the cost of a replacement gel cell nearly equals to cost of replacing  
>> the entire unit. ?The box also has a power cord, switch, and outlets  
>> which can easily be re-purposed as an all-in one bucking unit.  
>  
>  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From brianclarke01 at optusnet.com.au Tue Mar 20 00:39:04 2012  
From: brianclarke01 at optusnet.com.au (Brian Clarke)  
Date: Tue, 20 Mar 2012 15:39:04 +1100  
Subject: [BoatAnchors] OK Smart People: Capacitive Voltage Divider?  
References:  
<752B8617C0F247C38157105AB30E9D5F@DaddyPC><CAEJr0FuckyMEe\_qdoU5mDHWsdxumT\_bhy\_idXm  
wKKkrfTmnpqQ@mail.gmail.com>  
<4F67C0E8.6070600@kd5byb.net>  
<9E44DDBF91A54B27BBE2384DAE13053@WORKSHOP>  
<4F67CEB3.8050802@kd5byb.net>  
Message-ID: <4641C238F1FD41BF9FAA80D2A1A017D8@WORKSHOP>

Hello Ben,

Almost certainly excessive copper loss, under the conditions you have stated. So, your presumption of number 1 is probably correct.

There are two more possibilities for transformers to run hot on no load:  
3. running the primary beyond rated Voltage, eg, running a 110 Vac primary

on 125 Vac, or running a 220 Vac primary on 240 Vac

4. shorted turns, possibly through overheating and carbonising the inter-winding insulation or physical damage.

The reason for number 3 is that though most electricity distribution authorities are required to provide mains within +/- 10% of nominal, and though 110 + 10% is within 125 - 10%, the problem comes when the mains runs up to 125 + 10%, or when the distribution transformer tap-changer is 'asleep', and you get high mains Voltage. Here in Australia, we have recently 'harmonised' the mains down from nominally 240 Vac +/- 10% to 230 V -5%, +10% so European manufacturers can sell their stuff here without having to change the power transformer. But the harmonisation is more theoretical than real - in the middle of the day, my mains reads 238 Vac; and I have measured 268 Vac in the evening, ie, just after everyone has turned off their electric cookers and before the tap changer wakes up. At 268 Vac, a 220 Vac-rated transformer would suffer a 20% rise.

Here, the accountants would be laughing all the way to the bank as transformers burn out. And because of the stupid way economists calculate Gross National Product (GNP), the increased sales of power transformers makes GNP look better - so, we've just gotta keep breaking things to keep the gnomes of Zurich happy.

73 de Brian, VK2GCE.

On Tuesday, March 20, 2012 11:26 AM, Ben said:

> Hi Brian and all,

>

> In my case, I think it was number 1. Ran cool with no load, but even with  
> a 100VA load on a 400VA rated unit, it was getting hot. The UPS was only  
> designed to run maybe 10 minutes, so who cares if the transformer got hot?

> :(

>

> Thanks much and 73,

> ben, kd5byb

From vilgotch at bigpond.net.au Fri Mar 23 06:28:15 2012

From: vilgotch at bigpond.net.au (Morris Odell)

Date: Fri, 23 Mar 2012 21:28:15 +1100

Subject: [BoatAnchors] manual wanted

Message-ID: <000301cd08df\$a8522f60\$f8f68e20\$@bigpond.net.au>

Hi all,

I have found a 1970s vintage Sperry mark 8 marine radar indicator that I would like to hack into. It comes from a boat, is as heavy as an anchor, contains a nice 8 inch P7 CRT and the modulator section even has a couple of vacuum tubes :-). What I need is a manual or even just a schematic.

Does anyone have any paper on this beast? All costs happily covered of course.

73, Morris

From ddillman at igc.org Sat Mar 24 22:33:29 2012  
From: ddillman at igc.org (Richard Dillman)  
Date: Sat, 24 Mar 2012 19:33:29 -0700 (GMT-07:00)  
Subject: [BoatAnchors] MRHS Power Outage 24 March  
Message-ID: <4702720.1332642809908.JavaMail.root@elwamui-lapwing.atl.sa.earthlink.net>

Upon arrival at the receive site today at about noon local time Mike Payne reported on the two-way radio that power was out at the site. Inspection revealed that this was indeed the case. Thus KSM and K6KPH could not be keyed manually from the receive site.

Transmitter Supervisor Hawes stepped up to provide extended press and weather broadcasts on the KSM frequencies but K6KPH was silent today.

Mike offered to activate the station tomorrow, Sunday, but as of 7:30pm local time Saturday power was still out at the site. So... listen for us (and call us) next weekend. We have every hope that power will be restored by then!

RD

=====  
Richard Dillman, WPE2VT  
Chief Operator, Coast Station KSM  
Maritime Radio Historical Society  
<http://www.radiomarine.org>  
=====

From ddillman at igc.org Sun Mar 25 14:07:21 2012  
From: ddillman at igc.org (Richard Dillman)  
Date: Sun, 25 Mar 2012 11:07:21 -0700 (GMT-07:00)  
Subject: [BoatAnchors] MRHS Ops Sunday 25 March  
Message-ID: <31799960.1332698841093.JavaMail.root@mswamui-

backed.atl.sa.earthlink.net>

Power has been restored to the KSM/K6KPH receive site. Mike plans to arrive there at or a little after 1200pdt (1900utc) to activate both stations for Sunday operations.

It's not yet been decided if Sunday operations will be conducted on a regular basis.

RD

=====  
Richard Dillman, WPE2VT  
Chief Operator, Coast Station KSM  
Maritime Radio Historical Society  
<http://www.radiomarine.org>  
=====

From arc5 at ix.netcom.com Sun Mar 25 14:07:56 2012  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Sun, 25 Mar 2012 13:07:56 -0500  
Subject: [BoatAnchors] The NC-100A Lives...  
Message-ID: <AE51A97728024E2A88DCB3693AC335F5@DaddyPC>

I've been resurrecting a nice NC-100A I found at the Irving, Texas hamfest and got for a friend. It's been quite a challenge, good practice for bringing back my RCH and a lot of fun, but there were a couple of things that about kicked my butt ;-).

First: I'd like to know who designed that dial-cord stringing mess. Tell me where to find his headstone so I can do something unspeakable to it.

While I advocate minimal parts changes and low B+, this isn't my radio and besides- the caps in this set were just too far gone. Even with as little as 50 volts, they leaked badly. To make things worse, someone had been running the rig at full tilt with the bad caps, so there were roasted resistors, too. They're lucky they didn't fry the tranny. So a complete replacement of papers and electrolytics was in order, as well as the hi-R resistors, which was pretty straight-forward. Most of the tubes- especially the push-pull 6F6 audio PAs-

were dead flat from being run with bad bias.

I bucked-down the line voltage to 110 VAC and got to work.

There were some interesting problems:

Hot Audio PAs.

After refurbishing, the voltages on the 6F6s are right in line with the RCA tube manual specs for push-pull audio with -20 or better bias, etc. Yet the tubes ran HOT. The plates weren't showing color or anything, but you could boil water and fry eggs on these babies. I've been all through the stage- even built a replacement external audio output tranny and speaker to try in case I had some bad turns in the original, but no change. It sounds excellent, but I can't believe I should be able to fry-up chicken for lunch on the PAs. I decided to drop the screens by 50 volts to tone it down a bit. They're still hot, but not as bad and I can't see where the audio output has suffered a bit. Is it "normal" for these tubes to run this hot?

The Mysterious AVC Gremlin.

After the set warmed-up for a few minutes, the AVC started railing, pushing the "S" meter to the peg and killing the audio. Switching to MVC or CW OSC. worked normally. And here's the real head-scratcher: If I pulled the two audio PA tubes and just used the 1st audio to a 600-ohm speaker, the AVC functioned normally..... huh?

The scope told me the PA was amplifying what it got and the AVC was in fact railing. Then the scope decided to roll-over on me, so it was Fluke meter after that. I had replaced the 5-meg resistor (read 12 megs) and the 500k resistors (read 700k+).

The three 2-watt AVC voltage dividers / cathode resistor had gotten hot (which should have tipped me), but they checked good with the meter so I kept looking for something weird in the PA.

Well, The Almighty was kind today, because I finally managed to fix the AVC. It was the voltage divider resistors, of course. One look at the diagram should have told me the only way the 1k resistor can get hot dropping B- was if the cathode resistor went low-Z or if there was a heater-cathode short in the tube (which was now NOS), but I was too busy looking for something exotic.

Under voltage, the three old "bar-type" resistors

were acting like Glo-Bars and going low-Z.  
Replaced them with regular carbon comps  
and the receiver has been playing prettily on AVC  
for three hours now (knock wood!).  
Have any of you seen the old bar resistors suddenly  
become Glo-Bar resistors?  
I have no idea why removing the PAs made the  
AVC function normally- bound to have something  
to do with the loading of the B- buss,  
but your guess is as good as mine.

#### Safety Issues (aka God's Mercy)

These National guys don't seem to have taken much stock  
in safety. When the "B+" switch on the front is in the "OFF"  
position, the MUTING contacts- which are on a fully-exposed  
terminal strip just asking for fiddle fingers to touch-  
are at full B potential to ground. Can you say "ZZZZAP?"  
The external speaker jack on the front was fed from the plates  
of the PA tubes through a couple of nice, leaky .1 paper caps.  
So if some poor doofus plugged a set of headphones into this  
jack and then touched anything grounded, he would get a  
good idea of what it means to be strapped-into "Old Sparky"  
and "ride the lightning!" These caps joined the others  
in my trash can, of course.

But wait... it gets better:

The old cloth-covered cord which carries B+ and the  
PA plate leads, plus speaker field voltage to the external  
speaker cabinet \*looked\* just fine.... and nearly killed me.  
I grabbed the cabinet with both hands to turn it on its side  
for a coil tweek. In my carelessness, I grabbed the  
cloth-covered cord between my left hand and the chassis.  
350 Volts across the chest is.... unpleasant.  
But The Almighty decided he wasn't quite finished laughing  
at my nit-wittery, so he let me live another day and  
it turned me loose. Ya'll, I kid you not: I could taste the  
ions from the fillings in my teeth. OOOOOWWW!  
Now you know why I like low B+ so much.  
My RBH is gonna run on 90 volts or less. Promise.

Two issues remain.

The AVC is working, but it "pumps" on really strong signals.  
Is this normal for the rig, or do I need to look for some  
off-tolerance resistors in the biasing of the  
RF and IF stages? Maybe one of them isn't  
"getting the message" from the AVC buss.

And the BFO control- it's a very "tight" control,

meaning each dial division changes the BFO  
freq a lot. Is this normal for the NC-100?  
And it has "jumped" a couple of KCs a  
few times. I think this is from junk getting in the  
BFO cover, but I need to take it off and look.

This is the first National I've fully revived.  
I like it very much for SWL and for AM use.  
Let's hear your "war stories."

73 DE Dave AB5S

From spr at earthlink.net Sun Mar 25 14:37:13 2012  
From: spr at earthlink.net (spr at earthlink.net)  
Date: Sun, 25 Mar 2012 11:37:13 -0700 (GMT-07:00)  
Subject: [BoatAnchors] The NC-100A Lives...  
Message-ID: <25224969.1332700634021.JavaMail.root@mswamui-  
backed.atl.sa.earthlink.net>

Hi David,

The tube manual for power handling tubes generally calls out a maximum temperature  
on the glass envelope of 200 deg C, which is nearly 400 deg F. This is normal;  
these are tubes, made of sterner stuff than silicon crystals.

Peace,

Scott

-----Original Message-----

>From: David Stinson <arc5 at ix.netcom.com>  
>Sent: Mar 25, 2012 11:07 AM  
>To: National Radio Equipment <national at mailman.qth.net>, boatanchors at  
theporch.com  
>Subject: [BoatAnchors] The NC-100A Lives...  
>  
>I've been resurrecting a nice NC-100A I found  
>at the Irving, Texas hamfest and got for a friend.  
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>my RCH and a lot of fun, but there were a couple of things  
>that about kicked my butt ;-).  
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>Tell me where to find his headstone so



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>speaker cabinet \*looked\* just fine.... and nearly killed me.  
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>for a coil tweek. In my carelessness, I grabbed the  
>cloth-covered cord between my left hand and the chassis.  
>350 Volts across the chest is.... unpleasant.  
>But The Almighty decided he wasn't quite finished laughing

>at my nit-wittery, so he let me live another day and  
>it turned me loose. Ya'll, I kid you not: I could taste the  
>ions from the fillings in my teeth. 00000WWW!  
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>This is the first National I've fully revived.  
>I like it very much for SWL and for AM use.  
>Let's hear your "war stories."  
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>73 DE Dave AB5S  
>  
>  
>-----  
>BoatAnchors mailing list  
>BoatAnchors at theporch.com  
><https://minime.theporch.com/mailman/listinfo/boatanchors>

From wa5jci at flash.net Sun Mar 25 15:05:34 2012  
From: wa5jci at flash.net (wa5jci at flash.net)  
Date: Sun, 25 Mar 2012 14:05:34 -0500  
Subject: [BoatAnchors] The NC-100A Lives...  
In-Reply-To: <AE51A97728024E2A88DCB3693AC335F5@DaddyPC>  
References: <AE51A97728024E2A88DCB3693AC335F5@DaddyPC>  
Message-ID: <914134.65917.qm@smtp111.sbc.mail.mud.yahoo.com>

Good work.

At 01:07 PM 3/25/2012, you wrote:

>I've been resurrecting a nice NC-100A I found at the Irving, Texas  
>hamfest and got for a friend.  
>It's been quite a challenge, good practice for bringing back  
>my RCH and a lot of fun, but there were a couple of things that  
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>First: I'd like to know who designed that dial-cord stringing mess.  
>Tell me where to find his headstone so I can do something unspeakable to it.

It was probably the guy who first said "Let's run the water pipes in  
the walls and ceiling?"

>But wait... it gets better:  
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>PA plate leads, plus speaker field voltage to the external  
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>between my left hand and the chassis.  
>350 Volts across the chest is.... unpleasant.  
>But The Almighty decided he wasn't quite finished laughing  
>at my nit-wittery, so he let me live another day and  
>it turned me loose. Ya'll, I kid you not: I could taste the  
>ions from the fillings in my teeth. OOOOOWWW!  
>Now you know why I like low B+ so much.  
>My RBH is gonna run on 90 volts or less. Promise.

A mere jolt, you don't really get shocked until you smell like BBQ  
but make sure it's across your hand.

de Pete WA5JCI

From dgnova at verizon.net Sun Mar 25 17:02:47 2012  
From: dgnova at verizon.net (phil)  
Date: Sun, 25 Mar 2012 16:02:47 -0500  
Subject: [BoatAnchors] re NC-100  
Message-ID: <001c01cd0acc\$a0381ad0\$0301a8c0@phil7n5aw9y7mw>

I think you already know this, but incase you have forgotten it: The B- is not grounded but is like the BC-348. You might check the B- lines.  
Phil

From k1lky at earthlink.net Sun Mar 25 17:25:16 2012  
From: k1lky at earthlink.net (Roy Morgan)  
Date: Sun, 25 Mar 2012 17:25:16 -0400  
Subject: [BoatAnchors] The NC-100A Lives...  
In-Reply-To: <AE51A97728024E2A88DCB3693AC335F5@DaddyPC>  
References: <AE51A97728024E2A88DCB3693AC335F5@DaddyPC>  
Message-ID: <E3EBC2E6-296F-44E8-99E0-9C7AE2A575B8@earthlink.net>

On Mar 25, 2012, at 2:07 PM, David Stinson wrote:  
> ...the 6F6s are ... ran HOT. ...  
>> Is it "normal" for these tubes to run this hot?

David,

I think it may be. A quick measurement of the cathode self-bias resistor value and its running voltage (plus a small calculation) will get you the combine plate/screen current. If it is close to book value, then you have a case of too close to the edge design. I am convinced that none of us need the total power available from such an output stage. I suggest you increase the cathode resistor till the plate dissipation comes down to maybe 75 percent of what you find at first. You'll still have plenty of audio. And your 6F6's will last many hours of SWL-ing.

> ... I finally managed to fix the AVC. It was the voltage divider  
> resistors, of course. ... the three old "bar-type" resistors  
> were acting like Glo-Bars and going low-Z.

I guess that old carbon had some tricks for you. Never heard of that but I'll look out for it.

> ... I have no idea why removing the PAs made the  
> AVC function normally- bound to have something  
> to do with the loading of the B- buss,

I did not ponder carefully, but it appears from my schematic that some bias is developed from the audio output cathode resistor voltage. Maybe it gets fed into the detector circuit to be used in the AVC system.

> ... When the "B+" switch on the front is in the "OFF" position, the  
> MUTING contacts- ...

> are at full B potential to ground. Can you say "ZZZZAP?"

UCH! This reminds me of 1930s/40's transmitter construction that puts final Plate Voltage on ceramic terminal strips at the rear of the supply and RF chassis. I looked at manuals here and did not see any rear views of the receiver showing covers over any terminal strips. Even when present as built, these are often missing by the time we see these radios. I wonder if a little shield with screw driver holes could be bent up from plexiglas and mounted under those screws.

> The external speaker jack ... fed from the plates  
> of the PA tubes through a couple of nice, leaky .1 paper caps.

Good find. I notice that the output transformer is on the speaker not in the set. Maybe a small AA-5 output transformer fed with the capacitor scheme could be tucked under the chassis somewhere.

> ...The old cloth-covered cord which carries B+ and the  
> PA plate leads, plus speaker field voltage ... nearly killed me.

Is a new piece of wire in order? AES sells multi-conductor wire with cloth covering to replace the whole cord.

> ... The AVC is working, but it "pumps" on really strong signals.

AVC systems can be baffling. Maybe B+ is leaking in a wire harness.

> ... some off-tolerance resistors in the biasing of the RF and IF  
> stages? Maybe one of them isn't "getting the message" from the AVC  
> buss.

Seems like a very good idea. Hooray for 10 megohm input resistance VTVM's

> And the BFO ...has "jumped" a couple of KCs a  
> few times.

Suspect an intermittent silver mica.

Thanks for your report - I look forward to the suggestions of others and what you find.

Roy

Roy Morgan  
k1lky at earthlink.net  
K1LKY Since 1958 - Keep 'em Glowing!

From rbsingl at ilstu.edu Sun Mar 25 17:45:46 2012  
From: rbsingl at ilstu.edu (Singley, Rodger)  
Date: Sun, 25 Mar 2012 21:45:46 +0000  
Subject: [BoatAnchors] The NC-100A Lives...  
In-Reply-To: <AE51A97728024E2A88DCB3693AC335F5@DaddyPC>  
References: <AE51A97728024E2A88DCB3693AC335F5@DaddyPC>  
Message-ID: <0DEBF1C8D8437248BE53CD4213B89BD318DA751B@ISUEMBX02.ad.ilstu.edu>

Dave,

Output tubes and rectifiers are the hottest running tubes in the receiver and if the plates aren't showing color and the voltages are in spec it sounds normal. Dropping the voltage a bit to run them cooler won't hurt but they are probably fine as currently running.

I remember John Frye, who wrote the "Mac's Service Shop" column for Radio and Television News, related in one issue how a technician had been called to a home in the upper class section of town to repair a HiFi console hours before the homeowners were having a large party. The HiFi was in a room with very nice carpeting and he took care to put down a mat to protect the carpet. As he was troubleshooting he detected the odor of something burning but assumed it was the hostess preparing food for the party. He was later horrified to discover that part of the chassis had slipped off the mat during testing and the normally hot output tubes had scorched two silver dollar sized burns into the carpeting. The technician was able to provide a temporary carpet repair by using tweezers to pull little tufts of carpeting from around the edge molding which he then glued in to replace the scorched areas. Both the HiFi set and carpet were ready in time for the party. Frye also noted that most burns suffered by radio/TV techs occurred when they rested an arm on a hot rectifier or audio output tube while servicing.

If you find a receiver that doesn't have a really hot output tube, it probably has an open filament :)

Rodger WQ9E

Dr. Rodger B. Singley  
Professor of Marketing

-----Original Message-----

From: boatanchors-bounces at theporch.com [mailto:boatanchors-bounces at theporch.com] On Behalf Of David Stinson  
Sent: Sunday, March 25, 2012 1:08 PM

To: National Radio Equipment; boatanchors at theporch.com  
Subject: [BoatAnchors] The NC-100A Lives...

I've been resurrecting a nice NC-100A I found at the Irving, Texas hamfest and got for a friend. It's been quite a challenge, good practice for bringing back my RCH and a lot of fun, but there were a couple of things that about kicked my butt ;-).

First: I'd like to know who designed that dial-cord stringing mess. Tell me where to find his headstone so I can do something unspeakable to it.

While I advocate minimal parts changes and low B+, this isn't my radio and besides- the caps in this set were just too far gone. Even with as little as 50 volts, they leaked badly. To make things worse, someone had been running the rig at full tilt with the bad caps, so there were roasted resistors, too. They're lucky they didn't fry the tranny. So a complete replacement of papers and electrolytics was in order, as well as the hi-R resistors, which was pretty straight-forward. Most of the tubes- especially the push-pull 6F6 audio PAs- were dead flat from being run with bad bias.

I bucked-down the line voltage to 110 VAC and got to work. There were some interesting problems:

Hot Audio PAs.

After refurbing, the voltages on the 6F6s are right in line with the RCA tube manual specs for push-pull audio with -20 or better bias, etc. Yet the tubes ran HOT. The plates weren't showing color or anything, but you could boil water and fry eggs on these babies. I've been all through the stage- even built a replacement external audio output tranny and speaker to try in case I had some bad turns in the original, but no change. It sounds excellent, but I can't believe I should be able to fry-up chicken for lunch on the PAs. I decided to drop the screens by 50 volts to tone it down a bit. They're still hot, but not as bad and I can't see where the audio output has suffered a bit. Is it "normal" for these tubes to run this hot?

The Mysterious AVC Gremlin.



After the set warmed-up for a few minutes, the AVC started railing, pushing the "S" meter to the peg and killing the audio. Switching to MVC or CW OSC.

worked normally. And here's the real head-scratcher: If I pulled the two audio PA tubes and just used the 1st audio to a 600-ohm speaker, the AVC functioned normally..... huh?

The scope told me the PA was amplifying what it got and the AVC was in fact railing. Then the scope decided to roll-over on me, so it was Fluke meter after that.

I had replaced the 5-meg resistor (read 12 megs) and the 500k resistors (read 700k+).

The three 2-watt AVC voltage dividers / cathode resistor had gotten hot (which should have tipped me), but they checked good with the meter so I kept looking for something weird in the PA.

Well, The Almighty was kind today, because I finally managed to fix the AVC. It was the voltage divider resistors, of course. One look at the diagram should have told me the only way the 1k resistor can get hot dropping B- was if the cathode resistor went low-Z or if there was a heater-cathode short in the tube (which was now NOS), but I was too busy looking for something exotic.

Under voltage, the three old "bar-type" resistors were acting like Glo-Bars and going low-Z.

Replaced them with regular carbon comps and the receiver has been playing prettily on AVC for three hours now (knock wood!).

Have any of you seen the old bar resistors suddenly become Glo-Bar resistors?

I have no idea why removing the PAs made the AVC function normally- bound to have something to do with the loading of the B- buss, but your guess is as good as mine.

#### Safety Issues (aka God's Mercy)

These National guys don't seem to have taken much stock in safety. When the "B+" switch on the front is in the "OFF" position, the MUTING contacts- which are on a fully-exposed terminal strip just asking for fiddle fingers to touch- are at full B potential to ground. Can you say "ZZZZAP?"

The external speaker jack on the front was fed from the plates of the PA tubes through a couple of nice, leaky .1 paper caps. So if some poor doofus plugged a set of headphones into this jack and then touched anything grounded, he would get a good idea of what it means to be strapped-into "Old Sparky" and "ride the lightning!" These caps joined the others

in my trash can, of course.

But wait... it gets better:

The old cloth-covered cord which carries B+ and the PA plate leads, plus speaker field voltage to the external speaker cabinet \*looked\* just fine.... and nearly killed me. I grabbed the cabinet with both hands to turn it on its side for a coil tweek. In my carelessness, I grabbed the cloth-covered cord between my left hand and the chassis. 350 Volts across the chest is.... unpleasant.

But The Almighty decided he wasn't quite finished laughing at my nit-wittery, so he let me live another day and it turned me loose. Ya'll, I kid you not: I could taste the ions from the fillings in my teeth. 00000WWW!

Now you know why I like low B+ so much.

My RBH is gonna run on 90 volts or less. Promise.

Two issues remain.

The AVC is working, but it "pumps" on really strong signals. Is this normal for the rig, or do I need to look for some off-tolerance resistors in the biasing of the RF and IF stages? Maybe one of them isn't "getting the message" from the AVC buss.

And the BFO control- it's a very "tight" control, meaning each dial division changes the BFO freq a lot. Is this normal for the NC-100? And it has "jumped" a couple of KCs a few times. I think this is from junk getting in the BFO cover, but I need to take it off and look.

This is the first National I've fully revived. I like it very much for SWL and for AM use. Let's hear your "war stories."

73 DE Dave AB5S

---

BoatAnchors mailing list

BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

From w7qho at aol.com Sun Mar 25 19:31:48 2012

From: w7qho at aol.com (mac)

Date: Sun, 25 Mar 2012 16:31:48 -0700

Subject: [BoatAnchors] re NC-100

In-Reply-To: <001c01cd0acc\$a0381ad0\$0301a8c0@phil7n5aw9y7mw>  
References: <001c01cd0acc\$a0381ad0\$0301a8c0@phil7n5aw9y7mw>  
Message-ID: <2219AB25-2AFF-4D81-87B3-EF63C4222598@aol.com>

Ran into an AVC problem a while back with an RA0-7, a military derivative of the NC-100XA. Traced the problem to leakage on the phenolic board that mounts the contacts that mate with the contacts to the coils in the band switching honeycomb. Leakage was between two adjacent contact pins, one carrying B+ to the plate coil of the first RF amplifier and the other connecting the AVC line to the grid side of the amp. High Z path but enough to screw up the AVC. As I remember I just disconnected the AVC line from the grid side pin, grounded the pin and let the first stage run wide open. Worked FB.

Dennis D. W7QH0  
Glendale, CA

From knjhanlon at msn.com Sun Mar 25 22:15:26 2012  
From: knjhanlon at msn.com (JAMES HANLON)  
Date: Sun, 25 Mar 2012 20:15:26 -0600  
Subject: [BoatAnchors] 60 Meter CW anyone?  
Message-ID: <SNT106-W34DEE4BEA15A9F1E3A3648A0450@phx.gbl>

Since we are now authorized to use CW on 60 meters, I just tuned up my Viking II on 60. Amazingly it seems to work there pretty well. It wound up on the 40 meter band setting with the Viking VFO set on 160 around 1.8 mc, the oscillator tuning at 62, the buffer tuning at 21, the amplifier plate tuning at 39, and the loading switch on 2 and the fine loading at 65 into a 50 ohm Cantenna. I'm running about 200 mils plate current and getting about 85 watts out. I'm sure I can load up the center-fed Zepp there. Anyone up for a 60 meter CW QSO with boatanchor gear sometime?

Jim, W8KGI (New Mexico)

From w8au at sssnet.com Mon Mar 26 00:09:54 2012  
From: w8au at sssnet.com (w8au at sssnet.com)  
Date: Mon, 26 Mar 2012 00:09:54 -0400  
Subject: [BoatAnchors] 60 Meter CW anyone?  
In-Reply-To: <SNT106-W34DEE4BEA15A9F1E3A3648A0450@phx.gbl>  
References: <SNT106-W34DEE4BEA15A9F1E3A3648A0450@phx.gbl>  
Message-ID: <20120326043642.4D5B01C26343@minime.theporch.com>

At 10:15 PM 3/25/2012, JAMES HANLON wrote:

>Since we are now authorized to use CW on 60 meters, I just tuned up  
>my Viking II on 60. Amazingly it seems to work there pretty  
>well. It wound up on the 40 meter band setting with the Viking VFO  
>set on 160 around 1.8 mc, the oscillator tuning at 62, the buffer  
>tuning at 21, the amplifier plate tuning at 39, and the loading  
>switch on 2 and the fine loading at 65 into a 50 ohm Cantenna. I'm  
>running about 200 mils plate current and getting about 85 watts  
>out. I'm sure I can load up the center-fed Zepp there. Anyone up  
>for a 60 meter CW QSO with boatanchor gear sometime?

Sure. I have a TCS ready to go. Been listening on 5373 tonight but  
it's been  
occupied with SSB. Interesting thing is that CW can be carried on even though  
SSB is active, as long as you use a receiver with good selectivity.

If the SSB stations use a notch filter at 1.5 kHz they won't hear the CW, but  
I'm not sure they would all have this feature, or use it.

Perry w8au

From k9fd at flex.com Mon Mar 26 00:56:59 2012  
From: k9fd at flex.com (Merv Schweigert)  
Date: Sun, 25 Mar 2012 18:56:59 -1000  
Subject: [BoatAnchors] 60 Meter CW anyone?  
In-Reply-To: <20120326043642.4D5B01C26343@minime.theporch.com>  
References: <SNT106-W34DEE4BEA15A9F1E3A3648A0450@phx.gbl>  
<20120326043642.4D5B01C26343@minime.theporch.com>  
Message-ID: <4F6FF71B.6010008@flex.com>

Dont think that is correct Perry, only allowed one QSO per channel  
from what the FCC says,  
73 Merv K9FD/KH6

> Sure. I have a TCS ready to go. Been listening on 5373 tonight but  
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> occupied with SSB. Interesting thing is that CW can be carried on  
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>  
> Perry w8au  
> -----

> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>  
>

From w8au at sssnet.com Mon Mar 26 01:42:04 2012  
From: w8au at sssnet.com (w8au at sssnet.com)  
Date: Mon, 26 Mar 2012 01:42:04 -0400  
Subject: [BoatAnchors] 60 Meter CW anyone?  
In-Reply-To: <4F6FF71B.6010008@flex.com>  
References: <SNT106-W34DEE4BEA15A9F1E3A3648A0450@phx.gbl>  
<20120326043642.4D5B01C26343@minime.theporch.com>  
<4F6FF71B.6010008@flex.com>  
Message-ID: <20120326054211.5E9AB1C26797@minime.theporch.com>

At 12:56 AM 3/26/2012, Merv Schweigert wrote:  
>Dont think that is correct Perry, only allowed one QSO per channel  
>from what the FCC says,

You are correct, Merv. I only mentioned this to show that simultaneous comms could be done if it were permitted.

Back on "opening night" (March 5) I was having QSOs on 5373 and SSB stations started to appear off to the side of my selectivity curve but did not disturb my comms. Since I was there first I did not cease but continued on. It didn't seem to disturb the opr I was talking to, either.

SSB ops can certainly hear a 1500 Hz note. So it pays to check the freq first.

Now if two QSOs are using the same channel, but propagation is such that the other set of stations are weak, and no one is bothered by that I suppose the rule is not being broken.

Interesting subject.:-)

Perry

.....  
.....  
>>Sure. I have a TCS ready to go. Been listening on 5373 tonight  
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>>

>>Perry    w8au

>>

>>BoatAnchors mailing list

>>BoatAnchors at theporch.com

>><https://minime.theporch.com/mailman/listinfo/boatanchors>

>

>

>BoatAnchors mailing list

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><https://minime.theporch.com/mailman/listinfo/boatanchors>

From smithab11 at comcast.net   Mon Mar 26 08:29:46 2012

From: smithab11 at comcast.net (B Smith)

Date: Mon, 26 Mar 2012 08:29:46 -0400

Subject: [BoatAnchors] 60 Meter CW anyone?

In-Reply-To: <20120326054211.5E9AB1C26797@minime.theporch.com>

References: <SNT106-

W34DEE4BEA15A9F1E3A3648A0450@phx.gbl><20120326043642.4D5B01C26343@minime.theporch.com><4F6FF71B.6010008@flex.com>

<20120326054211.5E9AB1C26797@minime.theporch.com>

Message-ID: <96D3460AE1F74750B61EABD603C9A898@Dell560>

W8AU was the first station to work Delaware on 60 meters.    :-)

73

breck k4che

Dover, Delaware, ain't nutten    in Dover except

A NASCAR track, chickens,    and hams that can't solder.

-----  
From: <w8au at sssnet.com>

Sent: Monday, March 26, 2012 1:42 AM

To: "Merv Schweigert" <k9fd at flex.com>; <boatanchors at theporch.com>

Subject: Re: [BoatAnchors] 60 Meter CW anyone?

At 12:56 AM 3/26/2012, Merv Schweigert wrote:

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>>BoatAnchors mailing list  
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BoatAnchors mailing list  
BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

From arc5 at ix.netcom.com Mon Mar 26 08:51:25 2012  
From: arc5 at ix.netcom.com (arc5 at ix.netcom.com)  
Date: Mon, 26 Mar 2012 12:51:25 +0000  
Subject: [BoatAnchors] 60 Meter CW anyone?  
Message-ID: <20120326125125.0D1494C064@attemconn12.att.oz.com>

BAs on 60? I'd expect some 00 to drop his dentures in his hurry to turn you in for being 5 Hz off freq...

-----Original Message-----

From: B Smith <smithab11 at comcast.net>  
To: <boatanchors at theporch.com>,"B Smith" <smithab11 at comcast.net>  
Date: Monday, March 26, 2012 8:29:46 AM GMT-4  
Subject: Re: [BoatAnchors] 60 Meter CW anyone?

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73  
breck k4che

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A NASCAR track, chickens, and hams that can't solder.

-----  
From: <w8au at sssnet.com>  
Sent: Monday, March 26, 2012 1:42 AM  
To: "Merv Schweigert" <k9fd at flex.com>; <boatanchors at theporch.com>  
Subject: Re: [BoatAnchors] 60 Meter CW anyone?

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>>

>>Perry w8au

>>\_\_\_\_\_

>>BoatAnchors mailing list  
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>

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BoatAnchors mailing list  
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<https://minime.theporch.com/mailman/listinfo/boatanchors>

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BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From wb0eq at yahoo.com Mon Mar 26 11:02:58 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Mon, 26 Mar 2012 08:02:58 -0700 (PDT)  
Subject: [BoatAnchors] SWR ISSUE "CORRECTION"  
Message-ID: <1332774178.82344.YahooMailNeo@web45610.mail.sp1.yahoo.com>

Hi All,

I've had good luck pre-tuning 2- and 3-element, 15m and 10m conventional (full-size, straight elements) yagi antennas on the ground.

Trick is to aim them straight up (boom vertical), supported by a couple of wooden saw horses, about 4 feet tall (the taller, the better).? Make sure not too much conducting stuff around antenna to throw things off.

F-res changes are then quite a bit less when raising antenna up high into place

Now, has any body tried this with a Spiderbeam??? Should work, eh?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From wb0eq at yahoo.com Mon Mar 26 12:15:08 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Mon, 26 Mar 2012 09:15:08 -0700 (PDT)  
Subject: [BoatAnchors] MIL-spec LC bridge  
Message-ID: <1332778508.80366.YahooMailNeo@web45616.mail.sp1.yahoo.com>

I picked up a nice MIL-spec LCR bridge at recent Puyallup WA hamfest.

It's the ZM-30/U.? It was hard to find paperwork for it though.? Then I came across the equivalent AN/URM-90 for which there was paper stuff on BAMA.

Mine was made by Industrial Instruments Engineering Corp.? Being MIL-spec, build quality is of course superb---I say "beautiful".? And the bridge's physical condition is excellent.?

It has the fabled "magic eye" tube for fine balance plus a couple of miniature tubes and the dreaded selenium rectumfiers.

Unit also has a meter with a mechanical lock for transport.? I assume it's a (more sensitive?) galvanometer rather than the more common d'arsonval movement, but not sure about that.? You guys?? (In the interest of including all, are there any gals lurking here?)

All for \$15!? One online vendor sells these for \$300!? Well, I didn't buy it to make a killing, I didn't know the market value when I bought it. It looked great.? I want to use these things in my shack.

It seems like a very flexible bridge indeed, more so than, say, my Heathkit IM-something Z bridge.? Manual has lots of theory & how-to + cal instructions.

?

Have not fired it up yet, via Variac of course, tubes removed, etc., the usual suspended animation revival.

Speaking of the latter, just about all I now know about that I learned here over the past 15 years or so.? It's been an extraordinary education for me & I thank you all.? It has all come from folks being willing to share their electronic adventures with the list.? Bravo!

I really enjoy (vicariously) the trouble-shooting adventures on the list.

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From wb0eq at yahoo.com Mon Mar 26 13:08:22 2012

From: wb0eq at yahoo.com (John Sehring)

Date: Mon, 26 Mar 2012 10:08:22 -0700 (PDT)

Subject: [BoatAnchors] HP 403B AC VMs

Message-ID: <1332781702.36125.YahooMailNeo@web45607.mail.sp1.yahoo.com>

Got a couple of HP 403B AC VM's? for \$20 total including 2 slightly different-version original manuals at Puyallup hamfest

These 403B's need 24 volts worth of? nicads to function.

To avoid ground loops when making sensitive AC measurements, the 403B runs off of its internal nicads, pure DC, needs no connection to AC power or AC safety ground so everything's floating.

When unit is off, nicads are charged for next use.? Clever, but...it takes 20 sub-AA size cell nicads to do this.? Not surprisingly, these cells were shot & leaking.? After 35 years, they've earned it!? One pack was actually charging/discharging normally, had a 1978 date stamp!? Is that amazing or what.

The leaking of chemicals is of the type that wicks up wires and across switches leaving a whitish-greenish residue that is somewhat corrosive.? I found that Caig Deoxit dissolves this stuff nicely leaving shiny clean metal surfaces.

So where do I get 40 nicads at a nice price?? I've been "recycling" nicads & nimh cells for a long time.? I tried to ID those that were still ok & also to try and use matched pairs for the 20-cell string.? I attempted this by hand, manually charging & discharging them and noting start & ending voltages.

Well I think I could've guessed--I simply could not do it.? Way too complicated, way too many cells, way too much data.

Ham Radio Outlet was running a \$40 sale on a Maha smart charger.? It has umpteen functions for assessing/matching nicad/nimh cells.? I used it & was able to discard useless cells--the unit lets you know immediately which cells have excessive equivalent internal series resistance.? This is a really excellent way of assessing calls.

You can then have it measure the actual cell capacity (in mA-Hrs) for matching.? However, I was still needing to select 20 cells for each voltmeter so it took some time--hey I'm retired, my time costs no money!

I could have bought new cells, found some nicad's for about 1\$ each . Or could have used the small, rectangular 9 volt nicads, wire three? in series for 27 volts (no load).

It's nice to have two units to compare each other with for troubleshooting.

The VM's still have some problems, mostly leaky caps, my ESR tester does a quick job of IDing those.? These are HP units s worth reviving; if? I'm gonna have old crap equip. in my shack it might as well be the "best" of old crap (just kidding).

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From wb0eq at yahoo.com Mon Mar 26 13:18:18 2012

From: wb0eq at yahoo.com (John Sehring)

Date: Mon, 26 Mar 2012 10:18:18 -0700 (PDT)

Subject: [BoatAnchors] HP 400F

Message-ID: <1332782298.49688.YahooMailNeo@web45607.mail.sp1.yahoo.com>

Also from Puyallup, a Hewlett-Packard 400F AC voltmeter for \$5...I dicker a lot.

The 400F goes 20 dB further down in full scale measurement than my 403B's.? That is -80 dBmV or 0.1 millivolt!

This unit does not use internal batteries for isolation like the 403B, just a very carefully designed, quiet AC power supply.

However, it can conveniently take external (battery) voltage for making sensitive measurements.? It wants quite a bit more battery voltage though, both +\_33 to 55

VDC.? That's a LOT of cells!

I haven't attempted to resuscitate this unit yet.

I know these units are not tube types--so purists may howl.? But, being HP, they are so nicely made & perform so well--they "get along and play with" my tube type gear.

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From wb0eq at yahoo.com Mon Mar 26 13:21:50 2012

From: wb0eq at yahoo.com (John Sehring)

Date: Mon, 26 Mar 2012 10:21:50 -0700 (PDT)

Subject: [BoatAnchors] (no subject)

Message-ID: <1332782510.25628.YahooMailNeo@web45602.mail.sp1.yahoo.com>

Hi Gang,

Oops, sorry, this not sent to wrong list!

--John

=====

Hi All,

I've had good luck pre-tuning 2- and 3-element, 15m and 10m conventional (full-size, straight elements) yagi antennas on the ground.

Trick is to aim them straight up (boom vertical), supported by a couple of wooden saw horses, about 4 feet tall (the taller, the better).? Make sure not too much conducting stuff around antenna to throw things off.

F-res changes are then quite a bit less when raising antenna up high into place

Now, has any body tried this with a Spiderbeam??? Should work, eh?

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From wb0eq at yahoo.com Mon Mar 26 13:25:24 2012

From: wb0eq at yahoo.com (John Sehring)

Date: Mon, 26 Mar 2012 10:25:24 -0700 (PDT)

Subject: [BoatAnchors] Spurious question marks

Message-ID: <1332782724.61040.YahooMailNeo@web45604.mail.sp1.yahoo.com>

I've been getting spurious question marks in my notes to BA list for a long time.

Am using Yahoo for email, outgoing notes set for plain text.?

Anybody have a fix for this?? tnx

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From ebjr37 at charter.net Mon Mar 26 13:02:12 2012

From: ebjr37 at charter.net (Sandy)

Date: Mon, 26 Mar 2012 12:02:12 -0500

Subject: [BoatAnchors] 60 Meter CW anyone?

In-Reply-To: <20120326054211.5E9AB1C26797@minime.theporch.com>

References: <SNT106-

W34DEE4BEA15A9F1E3A3648A0450@phx.gbl><20120326043642.4D5B01C26343@minime.theporch.com><4F6FF71B.6010008@flex.com>

<20120326054211.5E9AB1C26797@minime.theporch.com>

Message-ID: <D1DE9A7E89CE49CEB3804025631B2C94@SandysLaptop>

Who can tell who you are hearing and not hearing on the same channel? If you have no propagation or extremely poor propagation, but good propagation elsewhere would this interfere with the "one QSO per channel" rule?

73,

Sandy W5TVW

-----Original Message-----

From: w8au at sssnet.com

Sent: Monday, March 26, 2012 12:42 AM

To: Merv Schweigert ; boatanchors at theporch.com

Subject: Re: [BoatAnchors] 60 Meter CW anyone?

At 12:56 AM 3/26/2012, Merv Schweigert wrote:

>Dont think that is correct Perry, only allowed one QSO per channel

>from what the FCC says,

You are correct, Merv. I only mentioned this to show that simultaneous comms

could be done if it were permitted.

Back on "opening night" (March 5) I was having QSOs on 5373 and SSB stations started to appear off to the side of my selectivity curve but did not disturb my comms. Since I was there first I did not cease

but continued on. It didn't seem to disturb the opr I was talking to, either.

SSB ops can certainly hear a 1500 Hz note. So it pays to check the freq first.

Now if two QSOs are using the same channel, but propagation is such that the other set of stations are weak, and no one is bothered by that I suppose the rule is not being broken.

Interesting subject.;-)

Perry

.....  
.....

>>Sure. I have a TCS ready to go. Been listening on 5373 tonight but it's  
>>been

>>occupied with SSB. Interesting thing is that CW can be carried on even  
>>though

>>SSB is active, as long as you use a receiver with good selectivity.

>>

>>If the SSB stations use a notch filter at 1.5 kHz they won't hear the CW,  
>>but

>>I'm not sure they would all have this feature, or use it.

>>

>>Perry w8au

>>

>>-----  
>>BoatAnchors mailing list

>>BoatAnchors at theporch.com

>><https://minime.theporch.com/mailman/listinfo/boatanchors>

>

>

>-----  
>BoatAnchors mailing list

>BoatAnchors at theporch.com

><https://minime.theporch.com/mailman/listinfo/boatanchors>

-----  
BoatAnchors mailing list

BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

-----  
No virus found in this message.

Checked by AVG - [www.avg.com](http://www.avg.com)

Version: 2012.0.1913 / Virus Database: 2114/4895 - Release Date: 03/26/12

From wb0eq at yahoo.com Mon Mar 26 13:29:46 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Mon, 26 Mar 2012 10:29:46 -0700 (PDT)  
Subject: [BoatAnchors] Maha charger  
Message-ID: <1332782986.94952.YahooMailNeo@web45611.mail.sp1.yahoo.com>

Forgot to mention model number of Maha smart charger:? MH-C9000.

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From w3kc at verizon.net Mon Mar 26 13:17:47 2012  
From: w3kc at verizon.net (ChasW3KC)  
Date: Mon, 26 Mar 2012 13:17:47 -0400  
Subject: [BoatAnchors] 60 Meter CW anyone?  
References: <20120326125125.0D1494C064@attemconn12.att.oz.com>  
Message-ID: <246682E4B84449A489D7B51DE1C80CD8@chasmmain>

It would be nice to find some xtals to put our BA's (Viking II etc) dead-on to 60m channels.

73 de Chas W3KC

----- Original Message -----

From: <arc5 at ix.netcom.com>  
Sent: Monday, March 26, 2012 8:51 AM  
Subject: Re: [BoatAnchors] 60 Meter CW anyone?  
> BAs on 60? I'd expect some 00 to drop his dentures in his hurry to turn  
> you in for being 5 Hz off freq.

From scb at hiwaay.net Mon Mar 26 15:19:30 2012  
From: scb at hiwaay.net (scb at hiwaay.net)  
Date: Mon, 26 Mar 2012 14:19:30 -0500  
Subject: [BoatAnchors] Leaking battery cleanup.  
Message-ID: <20120326141930.12495gqars5dvygy@webmail.hiwaay.net>

A recent posting ref'ed leaking Ni-Cads with the traveling corrosion problem. For most alkaline electrolytes a thorough scrubbing with white vinegar and an old toothbrush followed by a thorough distilled water rinse seems to work about as well as anything. Use warm baking soda solution with toothbrush scrub followed by thorough distilled water rinse for acidic electrolytes like lead acid and gel cell batts as well as burst Tantalum caps.



Steve

From wb0eq at yahoo.com Mon Mar 26 18:10:09 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Mon, 26 Mar 2012 15:10:09 -0700 (PDT)  
Subject: [BoatAnchors] LCR Bridge  
Message-ID: <1332799809.39965.YahooMailNeo@web45615.mail.sp1.yahoo.com>

Roy Morgan wrote:

The URM-90 is the complete outfit, I'd guess, with the ZM-30 being just the bridge part.

> Unit also has a meter with a mechanical lock for transport.? I assume it's a (more sensitive?) galvanometer

Yes, that meter thing is a very sensitive galvanometer.? Always lock it when not in use.

???? The meter movement is +-7.5 microamps with an R-int of 1000 ohms.

>? It seems like a very flexible bridge indeed, more so than, say, my Heathkit IM-something Z bridge.

Indeed, and much more accurate.? The ZM-30 maybe cost a hundred times what the Heath did.

?

???? Good to know, Roy.

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From n7rk at cox.net Mon Mar 26 20:25:07 2012  
From: n7rk at cox.net (David Hollander)  
Date: Mon, 26 Mar 2012 17:25:07 -0700  
Subject: [BoatAnchors] Boatanchor Sighting in the Movies  
Message-ID: <4F7108E3.3070800@cox.net>

In the new animated movie "The Adventures of Tintin", there is an interesting scene when Tintin enters the radio room on the old steamer he is on.

One of the animators must be seriously into boatanchors.

Here are some screen shots:

<http://www.arizonatubesupply.com/n7rk.com/tintin1.jpg>  
<http://www.arizonatubesupply.com/n7rk.com/tintin2.jpg>  
<http://www.arizonatubesupply.com/n7rk.com/tintin3.jpg>  
<http://www.arizonatubesupply.com/n7rk.com/tintin4.jpg>  
<http://www.arizonatubesupply.com/n7rk.com/tintin5.jpg>  
<http://www.arizonatubesupply.com/n7rk.com/tintin6.jpg>  
<http://www.arizonatubesupply.com/n7rk.com/tintin8.jpg>  
<http://www.arizonatubesupply.com/n7rk.com/tintin9.jpg>

Enjoy!

Dave N7RK

--

\*\*\*\*\*  
Dave N7RK                      Boatanchors Home Page: <http://n7rk.com>  
Phoenix, Arizona              \*DXCC Honor Roll\*      \*WAZ#22 - 75 Meter SSB\*

ex-XE2/N7RK, N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK, WN6IWX

Boatanchor and Antique Radio Collector

From w8au at sssnet.com Mon Mar 26 20:35:06 2012  
From: w8au at sssnet.com (w8au at sssnet.com)  
Date: Mon, 26 Mar 2012 20:35:06 -0400  
Subject: [BoatAnchors] 60 Meter CW anyone?  
In-Reply-To: <96D3460AE1F74750B61EABD603C9A898@Dell1560>  
References: <SNT106-W34DEE4BEA15A9F1E3A3648A0450@phx.gbl>  
            <20120326043642.4D5B01C26343@minime.theporch.com>  
            <4F6FF71B.6010008@flex.com>  
            <20120326054211.5E9AB1C26797@minime.theporch.com>  
            <96D3460AE1F74750B61EABD603C9A898@Dell1560>  
Message-ID: <20120327004219.DFE3E1C2D171@minime.theporch.com>

At 08:29 AM 3/26/2012, B Smith wrote:  
>W8AU was the first station to work Delaware on 60 meters.    :-)

Yea Breck:      Delaware is a good place to start a 60M CW W.A.S. ;-)

Perry

From w8au at sssnet.com Mon Mar 26 20:38:14 2012  
From: w8au at sssnet.com (w8au at sssnet.com)  
Date: Mon, 26 Mar 2012 20:38:14 -0400  
Subject: [BoatAnchors] 60 Meter CW anyone?  
In-Reply-To: <20120326125125.0D1494C064@attemconn12.att.oz.com>  
References: <20120326125125.0D1494C064@attemconn12.att.oz.com>  
Message-ID: <20120327004518.EF8E21C2D20C@minime.theporch.com>

At 08:51 AM 3/26/2012, arc5 at ix.netcom.com wrote:  
>BAs on 60? I'd expect some 00 to drop his dentures in his hurry to  
>turn you in for being 5 Hz off freq.

Hey, Dave....we're allowed to be + or - 20 cycles. Just keep an eye  
on your freq counter  
and your hand on the M.O. knob. :-)

Perry

From wb3fau55 at neo.rr.com Mon Mar 26 20:53:17 2012  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Mon, 26 Mar 2012 20:53:17 -0400  
Subject: [BoatAnchors] 60m qsos  
Message-ID: <20120327005317.ST2R4.133245.root@cdptpa-web05-z01>

someone said something earlier in this string- be careful not to interfere with  
an  
existing SSB qso? seems to me, interference on the ham bands is quite a common  
problem. so I start a QS0, on or near an existing qso, who is to say, i heard  
them?  
who can prove it?

From johnmb at nc.rr.com Mon Mar 26 21:33:11 2012  
From: johnmb at nc.rr.com (john)  
Date: Mon, 26 Mar 2012 21:33:11 -0400  
Subject: [BoatAnchors] [Boatanchors] Boatanchor Sighting in the Movies  
In-Reply-To: <1332810716.76365.YahooMailNeo@web43133.mail.sp1.yahoo.com>  
References: <4F7108E3.3070800@cox.net>  
<1332810716.76365.YahooMailNeo@web43133.mail.sp1.yahoo.com>  
Message-ID: <6.2.1.2.2.20120326213241.02af95e0@pop-server.nc.rr.com>

Honey, I shrunk the Collins and the S-38 is on steroids!

John  
K5MO

At 09:11 PM 3/26/2012, Bruce Long wrote:

>wow dave I'm impressed.

>Must be the best movie radio room depiction ever---- but I did not see

>any 500 kHz or low freq stuff

>even so

>

>thanks for giving us a chance to see these...bruce KJ3Z

>

>

>

>

> -----  
> From: David Hollander <n7rk at cox.net>

>To: BOATANCHORS <boatanchors at mailman.qth.net>;

>"Boatanchors at puck.nether.net" <Boatanchors at puck.nether.net>; Old Tube

>Radios <boatanchors at theporch.com>; National <national at mailman.qth.net>;

>HallicraftersRadios at yahoogroups.com; "collins at listserve.com"

><collins at listserve.com>; Arizona-AM at yahoogroups.com

>Sent: Monday, March 26, 2012 8:25 PM

>Subject: [Boatanchors] Boatanchor Sighting in the Movies

>

>In the new animated movie "The Adventures of Tintin", there is an

>interesting scene when Tintin enters the radio room on the old steamer he

>is on.

>

>One of the animators must be seriously into boatanchors.

>

>Here are some screen shots:

>

><http://www.arizonatubesupply.com/n7rk.com/tintin1.jpg>

><http://www.arizonatubesupply.com/n7rk.com/tintin2.jpg>

><http://www.arizonatubesupply.com/n7rk.com/tintin3.jpg>

><http://www.arizonatubesupply.com/n7rk.com/tintin4.jpg>

><http://www.arizonatubesupply.com/n7rk.com/tintin5.jpg>

><http://www.arizonatubesupply.com/n7rk.com/tintin6.jpg>

><http://www.arizonatubesupply.com/n7rk.com/tintin8.jpg>

><http://www.arizonatubesupply.com/n7rk.com/tintin9.jpg>

>

>Enjoy!

>

>Dave N7RK

>

>-- \*\*\*\*\*

>Dave N7RK Boatanchors Home Page: <http://n7rk.com>

>Phoenix, Arizona \*DXCC Honor Roll\* \*WAZ#22 - 75 Meter SSB\*

>  
>ex-XE2/N7RK, N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK, WN6IWX  
>  
>Boatanchor and Antique Radio Collector  
>  
>-----  
>Boatanchors mailing list  
>Boatanchors at puck.nether.net  
><https://puck.nether.net/mailman/listinfo/boatanchors>  
>-----  
>Boatanchors mailing list  
>Boatanchors at puck.nether.net  
><https://puck.nether.net/mailman/listinfo/boatanchors>

From w8au at sssnet.com Mon Mar 26 21:45:58 2012  
From: w8au at sssnet.com (w8au at sssnet.com)  
Date: Mon, 26 Mar 2012 21:45:58 -0400  
Subject: [BoatAnchors] 60m qsos  
In-Reply-To: <20120327005317.ST2R4.133245.root@cdptpa-web05-z01>  
References: <20120327005317.ST2R4.133245.root@cdptpa-web05-z01>  
Message-ID: <20120327014617.3FAB01C2D732@minime.theporch.com>

At 08:53 PM 3/26/2012, wb3fau55 at neo.rr.com wrote:  
>someone said something earlier in this string- be careful not to  
>interfere with an  
>existing SSB qso? seems to me, interference on the ham bands is  
>quite a common  
>problem. so I start a QS0, on or near an existing qso, who is to  
>say, i heard them?  
>who can prove it?

Right on! Purely subjective...

Perry

From n7rk at cox.net Mon Mar 26 21:49:29 2012  
From: n7rk at cox.net (David Hollander)  
Date: Mon, 26 Mar 2012 18:49:29 -0700  
Subject: [BoatAnchors] [Boatanchors] Boatanchor Sighting in the Movies  
In-Reply-To: <6.2.1.2.2.20120326213241.02af95e0@pop-server.nc.rr.com>  
References: <4F7108E3.3070800@cox.net>  
<1332810716.76365.YahooMailNeo@web43133.mail.sp1.yahoo.com>  
<6.2.1.2.2.20120326213241.02af95e0@pop-server.nc.rr.com>  
Message-ID: <4F711CA9.4050302@cox.net>

That S-38 is a good representation of the Lafayette/Trio HE-10 (KT-200) Receiver.

Look again!

From richardlo at admin.athabascau.ca Mon Mar 26 23:36:59 2012  
From: richardlo at admin.athabascau.ca (Richard Loken)  
Date: Mon, 26 Mar 2012 21:36:59 -0600 (MDT)  
Subject: [BoatAnchors] Boatanchor Sighting in the Movies  
In-Reply-To: <4F7108E3.3070800@cox.net>  
References: <4F7108E3.3070800@cox.net>  
Message-ID: <alpine.BSF.2.00.1203262133200.49301@discord.bogons>

On Mon, 26 Mar 2012, David Hollander wrote:

> In the new animated movie "The Adventures of Tintin", there is an  
> interesting scene when Tintin enters the radio room on the old steamer he  
> is on.

I think he must have walked right by the radio room and into the captain's ham shack.

Oh yes, and how did things work out between Milou and the rat?

--

Richard Loken VE6BSV, Unix System Administrator	:	"Anybody can be a father
Athabasca University	:	but you have to earn
Athabasca, Alberta Canada	:	the title of 'daddy'"
** richardlo at admin.athabascau.ca **	:	- Lynn Johnston

From wb3fau55 at neo.rr.com Tue Mar 27 04:51:53 2012  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Tue, 27 Mar 2012 4:51:53 -0400  
Subject: [BoatAnchors] 60 Meter CW anyone?  
In-Reply-To: <D1DE9A7E89CE49CEB3804025631B2C94@SandysLaptop>  
Message-ID: <20120327085154.2QC0A.136867.root@cdptpa-web05-z01>

the one qso per channel rule is good "busy work" for 00s. the FCC does not listen to the bands.

---- Sandy <ebjr37 at charter.net> wrote:

> Who can tell who you are hearing and not hearing on the same channel? If  
> you have no propagation or extremely poor propagation, but good propagation  
> elsewhere would this interfere with the "one QSO per channel" rule?  
>

> 73,  
>  
> Sandy W5TVW  
>  
> -----Original Message-----  
> From: w8au at sssnet.com  
> Sent: Monday, March 26, 2012 12:42 AM  
> To: Merv Schweigert ; boatanchors at theporch.com  
> Subject: Re: [BoatAnchors] 60 Meter CW anyone?  
>  
> At 12:56 AM 3/26/2012, Merv Schweigert wrote:  
> >Dont think that is correct Perry, only allowed one QSO per channel  
> >from what the FCC says,  
>  
> You are correct, Merv. I only mentioned this to show that simultaneous  
> comms  
> could be done if it were permitted.  
>  
> Back on "opening night" (March 5) I was having QSOs on 5373 and  
> SSB stations started to appear off to the side of my selectivity curve  
> but did not disturb my comms. Since I was there first I did not cease  
> but continued on. It didn't seem to disturb the opr I was talking to,  
> either.  
>  
> SSB ops can certainly hear a 1500 Hz note. So it pays to check  
> the freq first.  
>  
> Now if two QSOs are using the same channel, but propagation is such  
> that the other set of stations are weak, and no one is bothered by that  
> I suppose the rule is not being broken.  
>  
> Interesting subject.;-)  
>  
> Perry  
>  
>  
> .....  
> .....  
> >>Sure. I have a TCS ready to go. Been listening on 5373 tonight but it's  
> >>been  
> >>occupied with SSB. Interesting thing is that CW can be carried on even  
> >>though  
> >>SSB is active, as long as you use a receiver with good selectivity.  
> >>  
> >>If the SSB stations use a notch filter at 1.5 kHz they won't hear the CW,  
> >>but  
> >>I'm not sure they would all have this feature, or use it.  
> >>

```
> >>Perry    w8au
> >>-----
> >>BoatAnchors mailing list
> >>BoatAnchors at theporch.com
> >>https://minime.theporch.com/mailman/listinfo/boatanchors
> >
> >-----
> >BoatAnchors mailing list
> >BoatAnchors at theporch.com
> >https://minime.theporch.com/mailman/listinfo/boatanchors
>
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors
>
>
> -----
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 2012.0.1913 / Virus Database: 2114/4895 - Release Date: 03/26/12
>
> -----
> BoatAnchors mailing list
> BoatAnchors at theporch.com
> https://minime.theporch.com/mailman/listinfo/boatanchors
```

From thompson at mindspring.com Tue Mar 27 22:46:27 2012  
From: thompson at mindspring.com (David Thompson)  
Date: Tue, 27 Mar 2012 22:46:27 -0400  
Subject: [BoatAnchors] HC-10 SSB Adapter  
Message-ID: <01de01cd0c8c\$f99fb300\$785e4d0c@yourxb2x7j77gn>

Just received a Hammarlund HC-10 SSB Adapter.  
Looks complete and I had my manual from my first HC-10 in 1959. I plan to  
go thru it this week  
and assure everythig is still there.

The seller did not have a cabinet or either of the factory cables for 7 and  
9 pin IF tubes. If you have an original cabinet or either factory or home  
brew cables please let me know. I can pay cash or maybe do a trade. The  
nice thing about the cables is you did not have to modify the receiver  
to use the HC-10. The cables ended in tube extenders so you plugged that  
into the tube socket and the last IF back into the extender. I used the  
original HC-10 with a HQ-110. The HC-10 inventor, Frank Lester, W2AMJ  
(later W4AMJ)



told me in a 1994 interview that Hammarlund shipped every HC-10 with the two adapter cables.

The HC-10 is really a complete rear end to a receiver adding on after the last IF. It will work with virtually any receiver with a 455 kcs IF.

Frank put all or part of the HC-10 into the HQ-170, 180, and 145 among others. The combination of the HQ-110 and HC-10 was actually the HQ-170 in two boxes.

73 Dave K4JRB

From arc5 at ix.netcom.com Wed Mar 28 07:24:13 2012  
From: arc5 at ix.netcom.com (David Stinson)  
Date: Wed, 28 Mar 2012 06:24:13 -0500  
Subject: [BoatAnchors] The NC-100A "AVC Pumping" Issue.  
In-Reply-To: <2219AB25-2AFF-4D81-87B3-EF63C4222598@aol.com>  
References: <001c01cd0acc\$a0381ad0\$0301a8c0@phil7n5aw9y7mw>  
<2219AB25-2AFF-4D81-87B3-EF63C4222598@aol.com>  
Message-ID: <83EACEA877D84935A820457C947D99A9@DaddyPC>

Score one for Dennis! See his post below.  
The issue with AVC "pumping" on strong signals in the NC-100A was exactly what he spoke about concerning his RAO. Must be a common issue.  
I disconnected the RF amplifier 500k AVC filter resistor (R34) from the AVC line and grounded it, taping-off the AVC wire.  
The AVC now controls just the IFs.  
The S-Meter and AVC now work fine.  
Thanks, Dennis!

73 Dave AB5S

----- Original Message -----  
From: "mac" <w7qho at aol.com>  
Subject: Re: [BoatAnchors] re NC-100

> Ran into an AVC problem a while back with an RAO-7, a military  
> derivative of the NC-100XA. Traced the problem to leakage on the  
> phenolic board that mounts the contacts that mate with the contacts  
> to the coils in the band switching honeycomb. Leakage was between  
> two adjacent contact pins, one carrying B+ to the plate coil of

> the first RF amplifier and the other connecting the AVC line to the  
> grid side of the amp. High Z path but enough to screw up the AVC.  
> As I remember I just disconnected the AVC line from the grid side  
> pin, grounded the pin and let the first stage run wide open.  
> Worked FB.  
>  
>  
> Dennis D. W7QHO  
> Glendale, CA

From nbroline at austin.rr.com Wed Mar 28 14:14:30 2012  
From: nbroline at austin.rr.com (Nick Broline)  
Date: Wed, 28 Mar 2012 13:14:30 -0500  
Subject: [BoatAnchors] AVC Line Leakage in HQ-129X, Others  
In-Reply-To: <mailman.0.1332954000.77065.boatanchors@theporch.com>  
References: <mailman.0.1332954000.77065.boatanchors@theporch.com>  
Message-ID: <761844C4E3D747858101AD7D0D71DD0A@newdualath>

On two occasions I've had to re-wire the entire AVC line in HQ-129X receivers because of leakage from B+ sources. Initially, the AVC line was pulled high until the grids of controlled tubes clamped it with their diode action. When the tubes were removed it soared.

Naively believing it can't be too bad, I attacked terminal strips having adjacent B+ and AVC terminals and moved them to isolated, new terminals. That was a start, but not enough.

Next I found the wires in the wire harness were leaking, as was the switch in the BFO can. I had never encountered this level of leakage in phenolic, so I removed the switch in the BFO can and treated it by soaking it in methyl alcohol for a morning. It came out with no leakage, so I was sure it was repaired.....until I allowed it to lie on the bench for the afternoon. It returned to the same leakage level. I tried high concentration of isopropyl, heat, and every other solvent that was maliciously hygroscopic, but nothing solved the overall problem. I ended up replacing every terminal and wire that touched AVC before the AVC behaved normally.

I have also found both the postage stamp and radial lead brown silver micas to soak up water, lower the Q of the tuned circuit, and actually become batteries that supplied a dc voltage when open circuited. I found a great tip-off to be 1) stages that appear to be a little low in gain (as in radios like S-38's that need every ounce of gain possible) and the front end section of PMR-6&7's, and 2) isolating one end of the cap and measuring the dc voltage across the cap. Shorting it will remove the voltage temporarily, but the voltage (use VTVM) will slowly rise until it stabilizes as high as ? volt. The dc voltage is not typically a problem, but the fact that the cap

has adsorbed water and creating a dc voltage due to electrolytic action is a tip-off for a Q-killer. Evaluating L0 activity also can point to loss of Q. Switching between bands and finding some with low oscillator grid voltage often points to a low-Q SM. Of course one can't assume the oscillator excitation will be identical for all bands, and the activity will fall off with frequency, but it's a quick and dirty indicator.

Happy restoration and 73,

Nick Broline

W5FUA

512 327 7425

We shall not cease from exploration  
And at the end of exploring  
Will be to arrive where we started  
And know the place for the first time.

T.S. Eliot--"Little Gidding"

From gumbear at pacbell.net Wed Mar 28 16:01:58 2012

From: gumbear at pacbell.net (Arden Allen)

Date: Wed, 28 Mar 2012 13:01:58 -0700

Subject: [BoatAnchors] AVC Line Leakage in HQ-129X, Others

References: <mailman.0.1332954000.77065.boatanchors@theporch.com>

<761844C4E3D747858101AD7D0D71DD0A@newdualath>

Message-ID: <003001cd0d1e\$61ee7590\$dc9f480c@KB6NAX>

Thanks for that, Nick. Something to look forward to when I get to the '129X in my pile.

Arden Allen

KB6NAX

Adopt a shelter dog,  
save an innocent life,  
and make a friend forever =:-)

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From kd5byb at kd5byb.net Wed Mar 28 19:43:01 2012

From: kd5byb at kd5byb.net (Ben Hall)

Date: Wed, 28 Mar 2012 18:43:01 -0500

Subject: [BoatAnchors] A trip to Arkansas and a couple of mysteries...

Message-ID: <4F73A205.4090509@kd5byb.net>

Evening all,

Fellow list-member Don Reaves offered to fill in a major gap in my Navy receiver collection with an RBA, RBB, and an RBC. So on Monday, the wife, my six year old son, and yours truly hopped in our truck and made our way out to Arkansas. Got back today.

First, some notes on the trip itself. From Memphis to Don's house there are nice highways. Not so from Huntsville Alabama where we live to Memphis Tennessee. We took US 72 which is mostly non-limited access, mostly four-lane but not always, and runs through some nice rural areas.

I enjoy such roads, as you get to see a lot more than you would on an interstate. The downside as I found out coming home, is that if your wife pumps you full of coffee, water, and diet Gatorade, and the inevitable happens, there are not a plethora of rest areas or gas stations. :(

Now on to the excitement! ;) The truck was quite full - inside are the RBA, RBB, RBC, one power supply, two FSK converters, and a low-frequency HP signal generator (more on this guy later).

<<http://www.kd5byb.net/RBA/truck1.jpg>>

<<http://www.kd5byb.net/RBA/truck2.jpg>>

All is in very nice shape, with the RBA probably needing some new connectors to replace some that were removed and replaced with an ad-hoc wiring harness.

Now to the first mystery. The RBx series uses an odd antenna connector.

Sort of like the non-gender-specific General Radio RF connectors, I think - been a while since I've seen one of those. In one of the units Don found an adapter from the Navy connector to a BNC connector. It looks very well made - well-made enough to probably be military in origin. Anyone seen anything like this?

<<http://www.kd5byb.net/RBA/adapt1.jpg>>

<<http://www.kd5byb.net/RBA/adapt2.jpg>>

Now to the second mystery. Also picked up a Hewlett-Packard built Navy signal generator for low frequency use - the TS-535/U.

<<http://www.kd5byb.net/RBA/hpsg1.jpg>>

<<http://www.kd5byb.net/RBA/hpsg2.jpg>>

The thing is typical of HP - build quality is fantastic, component quality is fantastic, etc...

Now for the mystery. It is quoted in the URM-25D manual as being a piece of equipment one would use to fix / cal a URM-25D. So, I'm thinking lab grade. But, the tag says "for general radio use." Hmmn. And also, that's the \*only\* mention I could find across the whole internet. No other mention, no manual, no nothing. Would like to get this guy working but really want to look at a schematic first. The neat thing about this unit is that it has a little CRT on it for, I guess, monitoring the output signal? Very cool, yet odd to me. Any leads on a manual or schematic?

Anyway, got to finish unpacking so will close.

thanks much and 73,  
ben, kd5byb

From wb3fau55 at neo.rr.com Wed Mar 28 19:56:03 2012  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Wed, 28 Mar 2012 19:56:03 -0400  
Subject: [BoatAnchors] AVC Line Leakage in HQ-129X, Others  
In-Reply-To: <003001cd0d1e\$61ee7590\$dc9f480c@KB6NAX>  
Message-ID: <20120328235603.SK461.176443.root@cdptpa-web05-z01>

we have to consider the age of these things. Parts like mica caps don't usually fail,  
ceramic that is no longer the best RF insulator, 60 years old, but it can be fixed. Russ.

---- Arden Allen <gumbear at pacbell.net> wrote:

> Thanks for that, Nick. Something to look forward to when I get to the '129X  
> in my pile.

>

> Arden Allen

> KB6NAX

>

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>

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>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From laffitte at prtc.net Wed Mar 28 20:05:31 2012  
From: laffitte at prtc.net (Guido)  
Date: Wed, 28 Mar 2012 20:05:31 -0400  
Subject: [BoatAnchors] A trip to Arkansas and a couple of mysteries...  
In-Reply-To: <4F73A205.4090509@kd5byb.net>  
References: <4F73A205.4090509@kd5byb.net>  
Message-ID: <C6251E30162E4E079BE0EF14C6B566B7@GuidoPC>

I checked my RBC but the antenna connector had been replaced by the former owner. Great receivers. I am missing the RBB and RBA but the RBC has never let me down over the years. Just a couple of bypass caps replacement.

BTW, now I know why my YL has never allowed me to buy a pickup!

73s

Guido KP4FAR

-----Original Message-----

From: Ben Hall  
Sent: Wednesday, March 28, 2012 7:43 PM  
To: Old Tube Radios  
Subject: [BoatAnchors] A trip to Arkansas and a couple of mysteries...

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inevitable happens, there are not a plethora of rest areas or gas stations. :(

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Anyway, got to finish unpacking so will close.

thanks much and 73,  
ben, kd5byb

-----  
BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

-----  
No virus found in this message.  
Checked by AVG - [www.avg.com](http://www.avg.com)  
Version: 10.0.1424 / Virus Database: 2113/4900 - Release Date: 03/28/12

From navy.radio at gmail.com Thu Mar 29 13:27:04 2012  
From: navy.radio at gmail.com (Nick England)  
Date: Thu, 29 Mar 2012 13:27:04 -0400  
Subject: [BoatAnchors] Unbuilt DX-100 kits & lots more  
Message-ID: <CAB55hNfAkm6A6-WY200Gb1KVduj2TiHu7JfxgaQL8Z-w9FVr8g@mail.gmail.com>

Howdy gang - the fellow who was going to buy my big pile of unbuilt kits unfortunately didn't come through, so I'm selling them off individually. Here's your chance to build a DX-100, Apache, Marauder, Warrior, Chippewa, etc. Or to preserve an unbuilt kit as a record of ham radio history.

I'm offering them first to boatanchor buddies until Saturday 3/31 when I'll start listing them for auction on eBay. That is, I need to be paid by Saturday - paypal, credit card, or check via FedEx.

The list of kits with "Buy It Now" prices and photos are at <http://www.virhistory.com/ham/kitlistsale.htm> - prices do not include shipping which you'll have to pay. If you are willing to "Buy It Now", I'll ship it as soon as soon as I can after payment (or will deliver for free to the Dayton hamfest)

If you want to make an offer, I'll consider it, but may decide to gamble on ebay. WYSIWYG - I'm not going to go in and inventory/measure every carbon comp resistor in a DX-100 kit - I've tried to give an honest assessment of the condition of the kits, but what you'll get is what I got when I bought them over the last 20 years.

If you just want to moan about prices, old electrolytics, or the ridiculousness of collecting unbuilt kits, I'll save you the trouble - I freely admit nothing about this hobby or my obsessions are completely sane or rational. I'm partially crazy and if you're subscribed to a boatanchors e-mail list you probably are too.



73 & Have Fun,  
Nick K4NYW  
<http://www.virhistory.com/ham/kitlistsale.htm>

From k4oah at mindspring.com Thu Mar 29 14:56:09 2012  
From: k4oah at mindspring.com (Garey Barrell)  
Date: Thu, 29 Mar 2012 14:56:09 -0400  
Subject: [BoatAnchors] FS: MFJ 986 Differential Antenna Tuner  
Message-ID: <4F74B049.8040303@mindspring.com>

I have an MFJ 986 Differential-T antenna tuner in excellent condition that I no longer need.

This is a 3 kW SSB tuner, with a large, illuminated, cross-needle meter reading Peak or Average power. The tuner itself has a roller inductor with digital indicator and a split-stator differential capacitor, allowing 'two-handed' tuning. There is also a six position switch providing selection of either of two Coaxial, a single wire, dummy load, or a large, toroidal current balun for twin lead feeders.

Price is \$160 shipped in 48 US states.

--  
73, Garey - K40AH  
Glen Allen, VA

From kd5byb at kd5byb.net Thu Mar 29 17:51:32 2012  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Thu, 29 Mar 2012 16:51:32 -0500  
Subject: [BoatAnchors] A trip to Arkansas and a couple of mysteries...  
In-Reply-To: <C6251E30162E4E079BE0EF14C6B566B7@GuidoPC>  
References: <4F73A205.4090509@kd5byb.net>  
<C6251E30162E4E079BE0EF14C6B566B7@GuidoPC>  
Message-ID: <4F74D964.7080103@kd5byb.net>

Hi Guido and all,

On 3/28/2012 7:05 PM, Guido wrote:

> I checked my RBC but the antenna connector had been replaced by the  
> former owner. Great receivers. I am missing the RBB and RBA but the RBC  
> has never let me down over the years. Just a couple of bypass caps  
> replacement.

I'm hoping to have similar luck with my units. Certainly they are  
fascinating receivers!

> BTW, now I know why my YL has never allowed me to buy a pickup!

Heh heh heh. In our case, the XYL was part of the reason \*why\* we  
bought a pickup truck - she wanted it as much as I did! In fact, she  
loves driving it and is always threatening to take it from me. (over my  
dead body!)

Her and I came to an agreement before we got married - she would support  
my boatanchor hobby as long as I'd support her shoe, handbag, and  
make-up hobbies. Works great! ;)

thanks and 73,  
ben, kd5byb

From kd5byb at kd5byb.net Thu Mar 29 18:29:40 2012  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Thu, 29 Mar 2012 17:29:40 -0500  
Subject: [BoatAnchors] So this is a new one on me...  
Message-ID: <4F74E254.2020905@kd5byb.net>

Afternoon all,

After a run up to Vanderbilt today for a doctor's appointment for my  
wife, I decided, against my better judgement, to dig into the power  
supply for my RBA, RBB, and RBC. ;) I say "against my better  
judgement" because I already have about four BA projects running in  
parallel: my 500VDC supply, my 90VDC supply, the WS-19 power supply,  
the WS-19 itself, etc etc etc... ;)

It's sort of funny - Don remarked that the power supply would probably  
be okay, given that there were no electrolytics inside. I almost  
sarcastically said "yeah, but you don't know my luck Don!" And I should  
have said it. :(

So I open the guy up and I see lots of dirt and this sticky petroleum  
product. Okay, so one of the oil caps started leaking, no big cheese.  
Nope! It was the first filter choke.

Yep, the first filter choke had an area of the can that either rusted open, broke open, or something and leaked out all of its oil. Cleaned it up the best I could and once everything gets nice and dry, I'll weigh my options.

Anyone else seen a sealed, oil-filled transformer or choke let-go before? That's a new one on me.

One of the things I like so much about this hobby is that things like this give me an opportunity to work on a problem and figure out a solution. I mean - if everything worked right when plugged up, what fun would that be? None at all!

Thinking out loud (or on the keyboard)...

1) I've got to remove it to see what's going on. Is it a bust seam? A rusty spot?

2) Then figure out my options. Right now, I see a few:

a) if it is a busted soldered seam, I've got the tools to seal it back up. One of the other hobbies is old engines and I recently desoldered a Wisconsin fuel tank with my Hexcon big iron, pounded out the dents, and soldered it back together. ;) Believe I can refill with oil, seal up, and good as new, maybe?

b) believe it has two filter chokes because the Navy insisted on no electrolytics. Problem there is that they were limited in size with non-electro's, so it needed two stages of choke-filtering to get acceptable ripple. I have no such prohibition on electro's. ;) So I probably can replace the first choke with a power resistor of the right resistance, and increase later capacitance with electro's to get back to acceptable levels of ripple. ;)

c) I've started looking for a replacement. Could replace it with a Hammond choke on a plate, which would work, and fit okay, but look goofy.

Hhhmmn. Well, I need to think about this more.

thanks much and 73,  
ben, kd5byb

From wb3fau55 at neo.rr.com Thu Mar 29 19:08:27 2012  
From: wb3fau55 at neo.rr.com (wb3fau55 at neo.rr.com)  
Date: Thu, 29 Mar 2012 19:08:27 -0400  
Subject: [BoatAnchors] options for oil filled choke

In-Reply-To: <4F74E254.2020905@kd5byb.net>

Message-ID: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>

OK Ben, be careful around that old oil. Old enough where it likely contains carcinogenic [cancer causing] agents. I suppose you could refill it with new tranny oil and reseal it? Just do not get it on your hands- very nasty stuff. Wear rubber gloves and throw them away whe finished cleaning up the oil. 73 Russ.

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>

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> wife, I decided, against my better judgement, to dig into the power

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> thanks much and 73,  
> ben, kd5byb  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From kd5byb at kd5byb.net Thu Mar 29 19:59:10 2012  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Thu, 29 Mar 2012 18:59:10 -0500  
Subject: [BoatAnchors] options for oil filled choke  
In-Reply-To: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>  
References: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>  
Message-ID: <4F74F74E.90400@kd5byb.net>

Hi Russ,

Thanks for the reminder! I was pretty careful cleaning up the old oil -  
what little was left - thinking it might be a problem or, better "safe  
than sorry."

thanks much and 73,  
ben, kd5byb

On 3/29/2012 6:08 PM, wb3fau55 at neo.rr.com wrote:  
> OK Ben, be careful around that old oil. Old enough where it likely  
contains

> carcinogenic [cancer causing] agents. I suppose you could refill it with  
> new tranny oil and reseal it? Just do not get it on your hands- very nasty  
> stuff. Wear rubber gloves and throw them away whe finished cleaning up the  
> oil. 73 Russ.

From gumbear at pacbell.net Thu Mar 29 20:58:00 2012  
From: gumbear at pacbell.net (Arden Allen)  
Date: Thu, 29 Mar 2012 17:58:00 -0700  
Subject: [BoatAnchors] So this is a new one on me...  
References: <4F74E254.2020905@kd5byb.net>  
Message-ID: <001e01cd0e10\$db550460\$0f9e480c@KB6NAX>

So what's the big deal? The choke is probably still perfectly good. Just  
get on with restoring the radio. If the choke is going to fail you can then  
replace it with an equivalent open frame type. If the worry factor is too  
great put a fuse in line. At some time in the future you can address the  
aesthetics of leaky chokes. Concentrate on finishing a project.....

Arden Allen  
KB6NAX

The great pleasure of a dog is that you  
may make a fool of yourself with him  
and not only will he not scold you,  
but he will make a fool of himself too.  
-Samual Butler

> .....Yep, the first filter choke had an area of the can that either  
rusted  
open, broke open, or something and leaked out all of its oil. ....

From gumbear at pacbell.net Thu Mar 29 21:02:55 2012  
From: gumbear at pacbell.net (Arden Allen)  
Date: Thu, 29 Mar 2012 18:02:55 -0700  
Subject: [BoatAnchors] options for oil filled choke  
References: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>  
<4F74F74E.90400@kd5byb.net>  
Message-ID: <001f01cd0e10\$dceb82e0\$0f9e480c@KB6NAX>

Here we go again with PCB paranoia. The fact is it's not as dangerous as  
the hysterics claim. If you get any on your hands just wash them with soap  
and water to feel safe (yes, it's just about the feeling). If you licked it  
off of your fingers I don't think we would be reading your memorial on the  
List right away. :-0

Arden Allen  
KB6NAX

A lie can travel halfway around the world while  
the truth is putting on its shoes. -Mark Twain

From kd5byb at kd5byb.net Thu Mar 29 21:32:01 2012  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Thu, 29 Mar 2012 20:32:01 -0500  
Subject: [BoatAnchors] So this is a new one on me...  
In-Reply-To: <001e01cd0e10\$db550460\$0f9e480c@KB6NAX>  
References: <4F74E254.2020905@kd5byb.net>  
<001e01cd0e10\$db550460\$0f9e480c@KB6NAX>  
Message-ID: <4F750D11.3040704@kd5byb.net>

Hi Arden,

You know, that's a very good point. Until it fails, who cares? Might  
never fail.

A fuse in the line is probably a good idea, leaky choke or not...

thanks much,  
ben

On 3/29/2012 7:58 PM, Arden Allen wrote:

> So what's the big deal? The choke is probably still perfectly good. Just  
> get on with restoring the radio. If the choke is going to fail you can then  
> replace it with an equivalent open frame type. If the worry factor is too  
> great put a fuse in line. At some time in the future you can address the  
> aesthetics of leaky chokes. Concentrate on finishing a project.....  
>  
> Arden Allen  
> KB6NAX

From pmiddleton at niu.edu Thu Mar 29 23:24:30 2012  
From: pmiddleton at niu.edu (Peter Middleton)  
Date: Thu, 29 Mar 2012 22:24:30 -0500  
Subject: [BoatAnchors] ARRL Handbooks, etc.  
Message-ID: <4F74E120020000710010233B@smtp2.gw.niu.edu>

I have the following items I'd like to give to someone who would like  
them:

1. ARRL handbooks for the following years:

1946

1948

1959

1965

1978

1981

1984

1993 (Hardbound)

1994 (Hardbound)

1995

1998

2001

2. A like-new copy of "The World of Ham Radio 1901 \* 1950" by Richard Bartlett

3. A Smith Chart in its protective jacket in near perfect condition from Amphenol RF products 1964.

4. A new (in original wrapping) Collins mechanical filter PN F 250 A 20 that I believe is a 2 kHz wide (-3dB) filter designed for a 250 kHz IF.

I'll mail the whole lot to any US address. Just send me your mailing address and cover the postage and they're yours.

73,

Peter

K6UNO

DeKalb, IL

From hankvc at lostwells.net Fri Mar 30 02:30:08 2012

From: hankvc at lostwells.net (HankVC)

Date: Fri, 30 Mar 2012 00:30:08 -0600 (MDT)

Subject: [BoatAnchors] options for oil filled choke

In-Reply-To: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>

Message-ID: <201203300630.q2U6U9ZI013371@joanne.lostwells.net>

The esteemed Ben Hall has said:

>

> So I open the guy up and I see lots of dirt and this sticky petroleum

> product. Okay, so one of the oil caps started leaking, no big cheese.



> Nope! It was the first filter choke.  
>  
> Yep, the first filter choke had an area of the can that either rusted  
> open, broke open, or something and leaked out all of its oil. Cleaned  
> it up the best I could and once everything gets nice and dry, I'll weigh  
> my options.  
>  
> Thinking out loud (or on the keyboard)...  
>  
> 1) I've got to remove it to see what's going on. Is it a bust seam? A  
> rusty spot?  
>  
> 2) Then figure out my options. Right now, I see a few:  
>  
> a) if it is a busted soldered seam, I've got the tools to seal it back  
> up. One of the other hobbies is old engines and I recently desoldered a  
> Wisconsin fuel tank with my Hexcon big iron, pounded out the dents, and  
> soldered it back together. ;) Believe I can refill with oil, seal up,  
> and good as new, maybe?  
>  
> b) believe it has two filter chokes because the Navy insisted on no  
> electrolytics. Problem there is that they were limited in size with  
> non-electro's, so it needed two stages of choke-filtering to get  
> acceptable ripple. I have no such prohibition on electro's. ;) So I  
> probably can replace the first choke with a power resistor of the right  
> resistance, and increase later capacitance with electro's to get back to  
> acceptable levels of ripple. ;)  
>  
> c) I've started looking for a replacement. Could replace it with a  
> Hammond choke on a plate, which would work, and fit okay, but look goofy.  
>  
A few comments here, Ben.

1. I wouldn't sweat dealing with the infamous "PCB oil." Certainly not in the quantities you've got to deal with---if it's PCB at all. The EPA ramrodded that prohibition through in their early days, in the face of a lot of information that the stuff was not particularly harmful to much of anything (except maybe shellfish). Muscle-flexing on the part of that new agency, which left a bad taste with a lot of people. (EPA and OSHA were Nixon-era creations, so we can leave politics out of this).

2. I don't have any information on the RB-series. Most of National's specialty military sets in the WWII era were derived either from the NC100 or HRO-Jr. series. I'll assume the rectifier is a 5Z3 (4-pin 5U4) or an 80. Check that leaky choke for inductance and DC resistance before trying to salvage it.

And yes, a new Hammond replacement is suitable, if you need one. More henries than original is OK, but remember that it's with DC flowing (inductance killer); also, more-or-less match the DC resistance.

3. If that's two chokes and no electrolytics, it sounds to me like a choke input filter, which is an entirely different kettle of fish than a capacitor input. Effective voltage to the rectifier plates is 90% of RMS, not 141% of RMS. If it's a true choke input (no input cap to the first choke), the B secondary of the power transformer is likely to be about 125 volts higher to compensate. Stick with the original design configuration and parameters. The second choke will give much better ripple control, and much less voltage drop, than substituting any suitable resistor will.

In short, if you change the filter parameters, you're going to change B+ voltage, and you do not want to "over-volt" the set. Note that most of those designs don't actually need more than 250 volts, and that for the output audio tube. The rest of them (RF/Mixer/IF) are fine with only 180 as the plate supply.

Screen voltage and initial grid bias (cathode self-bias) are critical, and if you change the B+ level very much, you'll need to restore the design screen voltage. Most designs using the tubes National used expect 100 volts on the screens and -3 volts initial bias; but my recollection is that National used 70 screen volts (and less initial bias) on some designs.

As an example, the RME-45 that I rebuilt back in the early '90's, needed a power transformer, and I got a mechanical-fit replacement. But it was 750 VCT rather than something around 625, and the design was over-volted (310) and drew right on 125 ma. from an 80. I compensated for the overvoltage by using a choke-input, got rid of a high-current voltage divider. As I recall, the B+ feed went down to about 275 volts, with current draw more like 90 ma. I had to readjust resistances to get the intended 100 volts on the screens and to the oscillator plate. The reduction in voltage and current (watts) made a rather drifty hotbox design into a quite stable cool one.

Hank

From donreaves at gmail.com Fri Mar 30 04:43:12 2012  
From: donreaves at gmail.com (Don Reaves)  
Date: Fri, 30 Mar 2012 03:43:12 -0500  
Subject: [BoatAnchors] options for oil filled choke

In-Reply-To: <201203300630.q2U6U9ZI013371@joanne.lostwells.net>

References: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>

<201203300630.q2U6U9ZI013371@joanne.lostwells.net>

Message-ID: <CAEj02LZobKXXVaZnN-U0iQA=wQJPwoDWYXisacYr4=CczSy9Zw@mail.gmail.com>

Nice to hear Hank Van Cleef on the chat line here.? I have learned SO much from Hank I feel I owe him some money, or something.? LOL

Ben, something you said about the RBB power supply choke caused me to drag up some archived notes from way back and to revisit the power supply manual for the RBA/RBB/RBC.? So I had a little refresher tonight.? The unit in question is the Rectifier Power Unit, US Navy CRV-20130.? This is a 52 pound battleship ready power unit that provides about 33 watts of power to either an RBA (LF), RBB (MF), or RBC (HF) receiver.? The weight to power ratio is off the scale.? These RCA designed receivers want 6.3V at 3 amps, 105V regulated at 1 ma, and 200V at 58 ma.? The manual states one power unit can run two receivers simultaneously, in "emergency mode" but I have run two in 'normal' mode from 1 power unit without any hint of overheating.

Now to that choke.? This is a choke input filter following a 5U4 full wave rectifier.? Its a two stage with the first filter choke having a tap series connected to a 10MF cap for resonance at the ripple frequency.? You will see that both chokes are identical, each with 3 terminals but only the first choke uses the tap.? So keep that in mind if you decide to use a universal replacement.? Since they are identical chokes, you could change their respective positions and use the second choke as the first and the replacement as the second non-tapped one.? The chokes are rated at 10 henries, 105 ohms DC resistance.? One of the parts lists indicates the 10MF caps are paper but they are oil types, GE Pyranol rated 600V in sealed cans (uh, oh, call the EPA.? Again.? <grin> )? In this power supply they should last another 60 years.

The source for my notes came from NAVSHIPS 900473 which is online here:

[http://www.militaryradio.com/manuals/RBA\\_RBB\\_RBC/](http://www.militaryradio.com/manuals/RBA_RBB_RBC/)

By the way, the 91469 manual posted here is incomplete - it is missing section 3.? If anyone has a pdf of the complete NAVSHIPS 91469 I would like to replace the short one.

Don

P.S.? I once asked the young Roberta "Bobby" Barimore how she knew so much about old radio equipment and her answer was having insomnia with a lot of old radio manuals in the house.? At 3AM and wide awake I know what she means.

On Fri, Mar 30, 2012 at 1:30 AM, HankVC <hankvc at lostwells.net> wrote:

>  
> The esteemed Ben Hall has said:  
> >  
> > So I open the guy up and I see lots of dirt and this sticky petroleum  
> > product. ?Okay, so one of the oil caps started leaking, no big cheese.  
> > Nope! ?It was the first filter choke.  
> >  
> > Yep, the first filter choke had an area of the can that either rusted  
> > open, broke open, or something and leaked out all of its oil. ?Cleaned  
> > it up the best I could and once everything gets nice and dry, I'll weigh  
> > my options.  
> >  
> > Thinking out loud (or on the keyboard)...  
> >  
> > 1) ?I've got to remove it to see what's going on. ?Is it a bust seam? ?A  
> > rusty spot?  
> >  
> > 2) ?Then figure out my options. ?Right now, I see a few:  
> >  
> > a) if it is a busted soldered seam, I've got the tools to seal it back  
> > up. ?One of the other hobbies is old engines and I recently desoldered a  
> > Wisconsin fuel tank with my Hexcon big iron, pounded out the dents, and  
> > soldered it back together. ?;) ?Believe I can refill with oil, seal up,  
> > and good as new, maybe?  
> >  
> > b) believe it has two filter chokes because the Navy insisted on no  
> > electrolytics. ?Problem there is that they were limited in size with  
> > non-electro's, so it needed two stages of choke-filtering to get  
> > acceptable ripple. ?I have no such prohibition on electro's. ?;) ?So I  
> > probably can replace the first choke with a power resistor of the right  
> > resistance, and increase later capacitance with electro's to get back to  
> > acceptable levels of ripple. ?;)  
> >  
> > c) ?I've started looking for a replacement. ?Could replace it with a  
> > Hammond choke on a plate, which would work, and fit okay, but look goofy.  
> >  
> A few comments here, Ben.  
>  
> 1. ?I wouldn't sweat dealing with the infamous "PCB oil." ?Certainly  
> not in the quantities you've got to deal with---if it's PCB at all.  
> The EPA ramrodded that prohibition through in their early days, in the  
> face of a lot of information that the stuff was not particularly

> harmful to much of anything (except maybe shellfish). ?Muscle-flexing  
> on the part of that new agency, which left a bad taste with a lot of  
> people. ?(EPA and OSHA were Nixon-era creations, so we can leave  
> politics out of this).  
>  
> 2. ?I don't have any information on the RB-series. ?Most of National's  
> specialty military sets in the WWII era were derived either from the  
> NC100 or HRO-Jr. series. ?I'll assume the rectifier is a 5Z3 (4-pin  
> 5U4) or an 80. ?Check that leaky choke for inductance and DC  
> resistance before trying to salvage it.  
>  
> And yes, a new Hammond replacement is suitable, if you need one.  
> More henries than original is OK, but remember that it's with DC  
> flowing (inductance killer); also, more-or-less match the DC  
> resistance.  
>  
> 3. ?If that's two chokes and no electrolytics, it sounds to me like a  
> choke input filter, which is an entirely different kettle of fish than  
> a capacitor input. ? Effective voltage to the rectifier plates is 90%  
> of RMS, not 141% of RMS. ? It it's a true choke input (no input cap to  
> the first choke), the B secondary of the power transformer is likely  
> to be about 125 volts higher to compensate. ?Stick with the original  
> design configuration and parameters. ?The second choke will give much  
> better ripple control, and much less voltage drop, than substituting  
> any suitable resistor will.  
>  
> In short, if you change the filter parameters, you're going to change  
> B+ voltage, and you do not want to "over-volt" the set. ?Note that  
> most of those designs don't actually need more than 250 volts, and  
> that for the output audio tube. ?The rest of them (RF/Mixer/IF) are  
> fine with only 180 as the plate supply.  
>  
> Screen voltage and initial grid bias (cathode self-bias) are critical,  
> and if you change the B+ level very much, you'll need to restore the  
> design screen voltage. ?Most designs using the tubes National used  
> expect 100 volts on the screens and -3 volts initial bias; but my  
> recollection is that National used 70 screen volts (and less initial  
> bias) on some designs.  
>  
> As an example, the RME-45 that I rebuilt back in the early '90's,  
> needed a power transformer, and I got a mechanical-fit replacement.  
> But it was 750 VCT rather than something around 625, and the design  
> was over-volted (310) and drew right on 125 ma. from an 80. ?I  
> compensated for the overvoltage by using a choke-input, got rid of a  
> high-current voltage divider. ?As I recall, the B+ feed went down to  
> about 275 volts, with current draw more like 90 ma. ?I had to readjust  
> resistances to get the intended 100 volts on the screens and to the  
> oscillator plate. ? The reduction in voltage and current (watts) made

> a rather drifty hotbox design into a quite stable cool one.  
>  
> Hank  
>  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> <https://minime.theporch.com/mailman/listinfo/boatanchors>

--  
--

Don Reaves? W5OR WD2XSH/15  
8101 Barrett Rd. Roland AR 72135  
VOIP landline:?????? 843.868.1287

From kd5byb at kd5byb.net Fri Mar 30 08:54:59 2012  
From: kd5byb at kd5byb.net (Ben Hall)  
Date: Fri, 30 Mar 2012 07:54:59 -0500  
Subject: [BoatAnchors] options for oil filled choke  
In-Reply-To: <CAEj02LZobKXXVaNzN-U0iQA=wQJPwoDWYXisacYr4=CczSy9Zw@mail.gmail.com>  
References: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>  
<201203300630.q2U6U9ZI013371@joanne.lostwells.net>  
<CAEj02LZobKXXVaNzN-U0iQA=wQJPwoDWYXisacYr4=CczSy9Zw@mail.gmail.com>  
Message-ID: <4F75AD23.9040101@kd5byb.net>

Hi Don and Hank!

On 3/30/2012 3:43 AM, Don Reaves wrote:

> Nice to hear Hank Van Cleef on the chat line here. I have learned SO  
> much from Hank I feel I owe him some money, or something. LOL

Same here on both accounts. :)

> Now to that choke. This is a choke input filter following a 5U4 full  
> wave rectifier. Its a two stage with the first filter choke having a  
> tap series connected to a 10MF cap for resonance at the ripple  
> frequency. You will see that both chokes are identical, each with 3

And here is where my understanding went sideways. :( Initially I read  
this and started looking for differences in the manual, as the RBA  
manual I was using showed a cap-input filter. About halfway into the  
RBB/RBC manual, I slapped my head and went back to the RBA manual to  
check the value of that input filter: 0.1uF.

Duh, not enough to make it a cap input filter, I'm sure!

And now for "duh #2". I'd seen the tap on the choke but did not pay it any attention, thinking, "I'll get back to that." Well, I'm glad you brought it up, as I'd totally forgotten that I'd seen it!

So like you noted, swapping the positions becomes important.

Side note: One of the things I told Don at his house was that I was \*sure\* to make some comical errors getting these units up and working. It just always works that way with me. So perhaps this is comical errors number 1 and 2? :)

> resistance. One of the parts lists indicates the 10MF caps are paper  
> but they are oil types, GE Pyranol rated 600V in sealed cans (uh, oh,  
> call the EPA. Again.<grin> )

Hee hee! I saw that too and a smile came to my face.

So now back to reformulate my plan of attack. Still think I need to check the choke out electrically, but doubt I'll try to reseal the can or refill it full of oil. Well, I might apply some JB Weld epoxy or something to keep what oil might be left in there from migrating out.

As it has been pointed out, it might work fine for many years as-is, w/o any oil in it.

Anyways, fixin' to take the XYL grocery shopping so will close.

thanks much and 73,  
ben

From wb0eq at yahoo.com Fri Mar 30 10:55:12 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Fri, 30 Mar 2012 07:55:12 -0700 (PDT)  
Subject: [BoatAnchors] AVC Line Leakage in HQ-129X, Others  
Message-ID: <1333119312.73046.YahooMailNeo@web45616.mail.sp1.yahoo.com>

I found exactly the same problem of electrically leaky ordinary electronic components around 1985.

I couldn't quite believe the problems I had & as described in the BA note--how could phenolic & other plastics behave that way?

It was on a National NC-125.? I am only the 2nd owner of it.? It lived the first part of its life inside a shack, so no environmental abuse!? Is in excellent

physical condition.

I had to physically isolate the AVC line runs to fix it.? That was tough as the AVC line used some IF can bottom insulators as source & tie lines.

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From wb0eq at yahoo.com Fri Mar 30 10:59:40 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Fri, 30 Mar 2012 07:59:40 -0700 (PDT)  
Subject: [BoatAnchors] TS-535/U  
Message-ID: <1333119580.95670.YahooMailNeo@web45602.mail.sp1.yahoo.com>

How about a close up pix of the calibration sticker on it?

Just curious.

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From bill at iaxs.net Fri Mar 30 11:31:39 2012  
From: bill at iaxs.net (Bill Hawkins)  
Date: Fri, 30 Mar 2012 10:31:39 -0500  
Subject: [BoatAnchors] options for oil filled choke  
In-Reply-To: <201203300630.q2U6U9ZI013371@joanne.lostwells.net>  
References: <20120329230827.1PLZW.16437.root@cdptpa-web05-z01>  
<201203300630.q2U6U9ZI013371@joanne.lostwells.net>  
Message-ID: <3DBEA44A14754326A357A9037BBF79ED@system071>

The greatly esteemed Henry Van Cleef has described the situation in exquisite detail. There is perhaps one thing to add.

Seems like it would be useful to check insulation resistance as well. An arc to ground inside the choke could erode the metal to cause the leak, or not. I have had a couple of input chokes that were shorted to the case. Was the power supply fuse blown?

Bill Hawkins

-----Original Message-----

From: HankVC

Sent: Friday, March 30, 2012 1:30 AM



The esteemed Ben Hall has said:

>

> So I open the guy up and I see lots of dirt and this sticky petroleum  
> product. Okay, so one of the oil caps started leaking, no big cheese.

> Nope! It was the first filter choke.

>

A few comments here, Ben.

2. Check that leaky choke for inductance and DC  
resistance before trying to salvage it.

From w7qho at aol.com Fri Mar 30 12:47:38 2012

From: w7qho at aol.com (mac)

Date: Fri, 30 Mar 2012 09:47:38 -0700

Subject: [BoatAnchors] AVC Line Leakage in HQ-129X, Others

In-Reply-To: <1333119312.73046.YahooMailNeo@web45616.mail.sp1.yahoo.com>

References: <1333119312.73046.YahooMailNeo@web45616.mail.sp1.yahoo.com>

Message-ID: <6D20C891-0270-4E5C-8C9A-09CB2072BD92@aol.com>

John,

The AVC line in most BA receivers is a particularly high impedance  
circuit (500K - 1meg or more) and so would be adversely affected by  
even a small amount of leakage from HV (and other) circuits as  
encountered in your NC-125, my RAO-7 and Dave's NC-100. Wonder if  
this was a particularly National problem...?

Dennis D. W7QHO  
Glendale, CA

\*\*\*\*\*

On Mar 30, 2012, at 7:55 AM, John Sehring wrote:

> I found exactly the same problem of electrically leaky ordinary  
> electronic components around 1985.

>

> I couldn't quite believe the problems I had & as described in the BA  
> note--how could phenolic & other plastics behave that way?

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> lived the first part of its life inside a shack, so no environmental  
> abuse! Is in excellent physical condition.

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> I had to physically isolate the AVC line runs to fix it. That was  
> tough as the AVC line used some IF can bottom insulators as source &  
> tie lines.

>

>

> --John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

From spr at earthlink.net Fri Mar 30 13:25:12 2012

From: spr at earthlink.net (Scott Robinson)

Date: Fri, 30 Mar 2012 10:25:12 -0700

Subject: [BoatAnchors] AVC Line Leakage in HQ-129X, Others

In-Reply-To: <6D20C891-0270-4E5C-8C9A-09CB2072BD92@aol.com>

References: <1333119312.73046.YahooMailNeo@web45616.mail.sp1.yahoo.com>

<6D20C891-0270-4E5C-8C9A-09CB2072BD92@aol.com>

Message-ID: <4F75EC78.2030707@earthlink.net>

Folks,

The K-tran 3/4 inch square IF transformers popular in the 1950s and '60s  
get B+ to AVC leakage by means of silver whiskering on the common piece  
of mica that carries the caps for both windings.

/scott

On 3/30/12 9:47 AM, mac wrote:

> John,

>

> The AVC line in most BA receivers is a particularly high impedance  
> circuit (500K - 1meg or more) and so would be adversely affected by even  
> a small amount of leakage from HV (and other) circuits as encountered in  
> your NC-125, my RAO-7 and Dave's NC-100. Wonder if this was a  
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> Dennis D. W7QHO

> Glendale, CA

>

> \*\*\*\*\*

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>>

>> I couldn't quite believe the problems I had & as described in the BA  
>> note--how could phenolic & other plastics behave that way?  
>>  
>> It was on a National NC-125. I am only the 2nd owner of it. It lived  
>> the first part of its life inside a shack, so no environmental abuse!  
>> Is in excellent physical condition.  
>>  
>>  
>> I had to physically isolate the AVC line runs to fix it. That was  
>> tough as the AVC line used some IF can bottom insulators as source &  
>> tie lines.  
>>  
>>  
>> --John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada  
>> -----  
>> BoatAnchors mailing list  
>> BoatAnchors at theporch.com  
>> https://minime.theporch.com/mailman/listinfo/boatanchors  
>  
> -----  
> BoatAnchors mailing list  
> BoatAnchors at theporch.com  
> https://minime.theporch.com/mailman/listinfo/boatanchors  
>

From wb0eq at yahoo.com Fri Mar 30 15:18:39 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Fri, 30 Mar 2012 12:18:39 -0700 (PDT)  
Subject: [BoatAnchors] Cleaning BA's  
Message-ID: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>

What do you think of this?? Writeup is by a ham:

<http://www.californiahistoricalradio.com/2012/03/secret-weapon-chassis-cleaning/>

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From a.b.bonds at Vanderbilt.Edu Fri Mar 30 15:29:51 2012  
From: a.b.bonds at Vanderbilt.Edu (Bonds, A B)  
Date: Fri, 30 Mar 2012 14:29:51 -0500  
Subject: [BoatAnchors] Cleaning BA's  
In-Reply-To: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>  
References: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>  
Message-ID: <05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-

hcwnem03.ds.Vanderbilt.edu>

I have used this stuff. It is extremely aggressive. The part he left out is to use latex or nitrile gloves, it will eat your hands.

I have also had pretty good success cleaning up muddy cad-plated chassis with bathroom cleaners such as Tilex. Leaves a very nice glow to the plating.

All of that being said, I would NEVER use any of these cleaners anywhere near phenolic. The cleaners have to be ionic (lots of them free electrons floating around) and if they soak into the phenolic you are hosed. From first-hand experience with an AA5, and see the immediately previous string of posts on AVC lines. Crappy 1940s-1950s Hallicrafters phenolic seems especially susceptible.

A. B. Bonds

-----Original Message-----

From: boatanchors-bounces at theporch.com [mailto:boatanchors-bounces at theporch.com] On Behalf Of John Sehring  
Sent: Friday, March 30, 2012 2:19 PM  
To: Boatanchors List  
Subject: [BoatAnchors] Cleaning BA's

What do you think of this?? Writeup is by a ham:

<http://www.californiahistoricalradio.com/2012/03/secret-weapon-chassis-cleaning/>

?

--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

-----  
BoatAnchors mailing list

BoatAnchors at theporch.com

<https://minime.theporch.com/mailman/listinfo/boatanchors>

From gumbear at pacbell.net Fri Mar 30 16:57:23 2012

From: gumbear at pacbell.net (Arden Allen)

Date: Fri, 30 Mar 2012 13:57:23 -0700

Subject: [BoatAnchors] Cleaning BA's

References: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>

Message-ID: <004d01cd0eb7\$bda14800\$7c9d480c@KB6NAX>

John Sehring asks:

> What do you think of this? Writeup is by a ham:

>

<http://www.californiahistoricalradio.com/2012/03/secret-weapon-chassis-cleaning/>

My answer is, no, I wouldn't use the stuff to clean a BA, oscilloscope, hi-fi, or anything containing electronic components or sliding contact switches and tuning capacitors.

Reason 1: It contains sodium hydroxide, an alkaline ionic compound that can leave corrosive residue in insulators.

Reason 2: It contains powerful solvents that can attack (as mentioned) paint and susceptible plastics like polystyrene and polysulfone. It also can dissolve the resin in phenolics (bakelite).

Reason 3: It contains sylicates, a polishing compound that will wear away contact plating on rotary and sliding switch contacts and tuning capacitor wipers.

Here's the MSDS:

<http://www.deltaindustrial.com/MSDS/Cleaners/CastrolSuperClean.pdf>

No doubt the "secret" to Bonono's success is minimizing exposure to the stuff and thorough rinsing. But from my perspective I'd rather leave a film of protective dirt on a chassis than expose it to the corrosion producing moisture and pollution laden atmosphere. Nicotine resin, stinky as it can be, is a protectant, to be succinct. Also, from my perspective, I don't like cleaning methods that require risking parts by requiring yoga exercises to keep certain parts spared from the "secret weapon" cleaning solution. With the exception of open frame and non-hermetic transformers which must be removed, the method I prefer is virtual total emersion cleaning by applying a cleaning solution liberally and then lathering everything with soft brushes to aid in scum and crust removal without worrying about exposure time within reason. Therefore I use a relatively weak approximately pH neutral cleaning solution, free of hydrocarbon solvents and polishing compounds, that aids ordinary water solvency dirt removal. The best cleaning material I've encountered so far that meets my criterion is Crystal Simple Green (Don't forget the "Crystal" version of the product). Of course thorough rinsing should be done with low mineral content water such as distilled water from the market, and complete drying before electrifying again.

Here's the MSDS:

[http://www.simplegreen.com/pdfs/MSDS\\_EN-US\\_Crystal.pdf](http://www.simplegreen.com/pdfs/MSDS_EN-US_Crystal.pdf)

I've used Castrol Super Clean to clean driveway oil and grease spots and prepare surfaces for painting. Works great for those kinds of simple tasks

that require an aggressive cleaner.

Arden Allen  
KB6NAX

I love a dog. He does nothing for political reasons.  
-Will Rogers

From spr at earthlink.net Fri Mar 30 17:54:48 2012  
From: spr at earthlink.net (Scott Robinson)  
Date: Fri, 30 Mar 2012 14:54:48 -0700  
Subject: [BoatAnchors] Cleaning BA's...and careful rinsing!  
In-Reply-To: <05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-hcwnem03.ds.Vanderbilt.edu>  
References: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>  
<05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-hcwnem03.ds.Vanderbilt.edu>  
Message-ID: <4F762BA8.1010305@earthlink.net>

Folks,

I use WD-40 to get nicotine off the chassis. It is not ionic, just deodorized kerosene, and won't eat metal or make insulators conductive. It all evaporates in a month or so, too.

BUT...if you want to use an ionic cleaner (anything soap-like--Simple Green, etc.) you must be able to THOROUGHLY rinse several times with faucet water and twice with distilled water. If you don't do this, your nice, clean chassis is likely to be a rusty mess in a couple of years' time.

I see no way to use ionic cleaners on a chassis unless you have stripped ALL the parts, including tube sockets and terminal strips--out of it. My objective is works as well as new now and for a long time, and still looks as good as possible in 20 years. If "as possible" ain't pristine, that's better than pretty but electrically leaky now and rusted in 20 years. I want to preserve this wonderful technology for the long term.

About 15 years ago, someone on rec.antiques.radio+phono (remember usenet...?) did very interesting experiment. He had access to a tropical environment test chamber at work. He cleaned a bunch of electrical box covers with various household cleaners and rinsed them. He then rinsed half of each one very carefully with distilled water. After a month in the chamber, the carefull rinsed halvesstill looked pretty good, but the casually rinsed halves were quite rusty. I wish I had saved the "after" picture, but I didn't.

Let's keep this stuff good, folks!

/scott

On 3/30/12 12:29 PM, Bonds, A B wrote:

> I have used this stuff. It is extremely aggressive. The part he left out is to use latex or nitrile gloves, it will eat your hands.

>

> I have also had pretty good success cleaning up muddy cad-plated chassis with bathroom cleaners such as Tilex. Leaves a very nice glow to the plating.

>

> All of that being said, I would NEVER use any of these cleaners anywhere near phenolic. The cleaners have to be ionic (lots of them free electrons floating around) and if they soak into the phenolic you are hosed. From first-hand experience with an AA5, and see the immediately previous string of posts on AVC lines. Crappy 1940s-1950s Hallicrafters phenolic seems especially susceptible.

>

> A. B. Bonds

>

> -----Original Message-----

> From: boatanchors-bounces at theporch.com [mailto:boatanchors-bounces at theporch.com] On Behalf Of John Sehring

> Sent: Friday, March 30, 2012 2:19 PM

> To: Boatanchors List

> Subject: [BoatAnchors] Cleaning BA's

>

> What do you think of this? Writeup is by a ham:

>

>

> <http://www.californiahistoricalradio.com/2012/03/secret-weapon-chassis-cleaning/>

>

>

> --John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

-----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

>

>

> -----  
> BoatAnchors mailing list

> BoatAnchors at theporch.com

> <https://minime.theporch.com/mailman/listinfo/boatanchors>

>

From kd5byb at kd5byb.net Fri Mar 30 20:21:36 2012

From: kd5byb at kd5byb.net (Ben Hall)

Date: Fri, 30 Mar 2012 19:21:36 -0500

Subject: [BoatAnchors] TS-535/U  
In-Reply-To: <1333119580.95670.YahooMailNeo@web45602.mail.sp1.yahoo.com>  
References: <1333119580.95670.YahooMailNeo@web45602.mail.sp1.yahoo.com>  
Message-ID: <4F764E10.2030404@kd5byb.net>

Hi John and list,

On 3/30/2012 9:59 AM, John Sehring wrote:  
> How about a close up pix of the calibration sticker on it?  
>  
> Just curious.

No problemmo:

<<http://www.kd5byb.net/RBA/ts535cal.jpg>>

Enjoy!

Thanks and 73,  
Ben, kd5byb

From k1lky at earthlink.net Fri Mar 30 21:02:28 2012  
From: k1lky at earthlink.net (Roy Morgan)  
Date: Fri, 30 Mar 2012 21:02:28 -0400  
Subject: [BoatAnchors] Cleaning BA's...and careful rinsing!  
In-Reply-To: <4F762BA8.1010305@earthlink.net>  
References: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>  
<05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-hcwnem03.ds.Vanderbilt.edu>  
<4F762BA8.1010305@earthlink.net>  
Message-ID: <F9085B81-0047-4CAA-88DB-E0CEE19BDF2D@earthlink.net>

On Mar 30, 2012, at 5:54 PM, Scott Robinson wrote:

> .....if you want to use an ionic cleaner (anything soap-like--  
> Simple Green, etc.) you must be able to THOROUGHLY rinse several  
> times with faucet water and twice with distilled water.

Army aviation maintenance newsletter PS 573, August, 2000, Pg 35 says,  
in part:

"Never use a cleaning product on your  
aircraft that has not been approved by  
the Army. SIMPLE GREEN has not  
been approved and is not authorized  
for use as an aircraft wash.  
It is highly corrosive on aircraft aluminum.



It also makes high-strength aircraft alloys brittle. If your unit is using SIMPLE GREEN as an aircraft wash, STOP!

If you have already used it, thoroughly wash your aircraft with fresh water and an approved Army aircraft cleaning agent. ... Follow that cleaning with a corrosion inspection and treatment and an application of approved corrosion preventive compounds ... "

What this world needs is a good \$5 a gallon aircraft cleaner!  
(With apologies to whomever said "What this world needs is a good five cent cigar.")

By the way, has anyone got any facts about the rumor that 409 cleaner has been changed?

And: is 50-50 household ammonia and 409 "ionic"?

Roy

Roy Morgan  
k1lky at earthlink.net  
K1LKY Since 1958 - Keep 'em Glowing!

From spr at earthlink.net Fri Mar 30 22:10:07 2012  
From: spr at earthlink.net (Scott Robinson)  
Date: Fri, 30 Mar 2012 19:10:07 -0700  
Subject: [BoatAnchors] Cleaning BA's...and careful rinsing!  
In-Reply-To: <F9085B81-0047-4CAA-88DB-E0CEE19BDF2D@earthlink.net>  
References: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>  
<05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-hcwnem03.ds.Vanderbilt.edu>  
<4F762BA8.1010305@earthlink.net>  
<F9085B81-0047-4CAA-88DB-E0CEE19BDF2D@earthlink.net>  
Message-ID: <4F76677F.6070407@earthlink.net>

Well. ammonia is certainly ionic, so the mixture will be, too.

"Ionic" means in this context any kind of soap stuff, so nearly all cleaners. Oil based things like WD-40 (deodorized Kerosene) are not ionic and don't corrode metals or conduct electricity as ionic compounds do. More active such liquids like lacquer thinner won't bother metal but

dissolve most plastics.

Use care.

/scott

On 3/30/12 6:02 PM, Roy Morgan wrote:

>

> On Mar 30, 2012, at 5:54 PM, Scott Robinson wrote:

>

>> .....if you want to use an ionic cleaner (anything soap-like--Simple

>> Green, etc.) you must be able to THOROUGHLY rinse several times with

>> faucet water and twice with distilled water.

>

> Army aviation maintenance newsletter PS 573, August, 2000, Pg 35 says,

> in part:

>

> "Never use a cleaning product on your

> aircraft that has not been approved by

> the Army. SIMPLE GREEN has not

> been approved and is not authorized

> for use as an aircraft wash.

> It is highly corrosive on aircraft aluminum.

> It also makes high-strength aircraft

> alloys brittle. If your unit is using

> SIMPLE GREEN as an aircraft wash,

> STOP!

>

> If you have already used it, thoroughly

> wash your aircraft with fresh

> water and an approved Army aircraft

> cleaning agent. ... Follow that

> cleaning with a corrosion inspection

> and treatment and an application of

> approved corrosion preventive compounds ... "

>

> What this world needs is a good \$5 a gallon aircraft cleaner!

> (With apologies to whomever said "What this world needs is a good five

> cent cigar.")

>

> By the way, has anyone got any facts about the rumor that 409 cleaner

> has been changed?

> And: is 50-50 household ammonia and 409 "ionic"?

>

> Roy

>

> Roy Morgan

> k1lky at earthlink.net

> K1LKY Since 1958 - Keep 'em Glowing!  
>  
>  
>  
>

From wa5jci at flash.net Fri Mar 30 22:52:41 2012  
From: wa5jci at flash.net (wa5jci at flash.net)  
Date: Fri, 30 Mar 2012 21:52:41 -0500  
Subject: [BoatAnchors] Cleaning BA's...and careful rinsing!  
In-Reply-To: <4F76677F.6070407@earthlink.net>  
References: <1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com>  
<05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-hcwnem03.ds.Vanderbilt.edu>  
<4F762BA8.1010305@earthlink.net>  
<F9085B81-0047-4CAA-88DB-E0CEE19BDF2D@earthlink.net>  
<4F76677F.6070407@earthlink.net>  
Message-ID: <649141.812.qm@smtp106.sbc.mail.mud.yahoo.com>

Years ago in another life when commercial FM radios, such as police, etc., were still mostly tubes the owner of the shop would buy radios by the pickup load after any flooding disaster, and most of the time they were from Louisiana and the oil industry. I think he gave something like twenty dollars per radio but it's been so long ago I've forgotten the exact amount. We'd take'em to a car wash and give'em a good washing and rinsing, afterwards we would leave'em out in the Texas sun for a week or so depending on weather conditions. I was always amazed how many of'em worked when fired up. Most of the others only needed minor repair but a few were meant for the bonyard because they weren't worth the effort in dollars to repair them.

de Pete WA5JCI

From gumbear at pacbell.net Sat Mar 31 00:50:42 2012  
From: gumbear at pacbell.net (Arden Allen)  
Date: Fri, 30 Mar 2012 21:50:42 -0700  
Subject: [BoatAnchors] Cleaning BA's...and careful rinsing!  
References:  
<1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com><05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-hcwnem03.ds.Vanderbilt.edu><4F762BA8.1010305@earthlink.net><F9085B81-0047-4CAA-88DB-E0CEE19BDF2D@earthlink.net>  
<4F76677F.6070407@earthlink.net>  
Message-ID: <004001cd0efa\$026ea170\$fd9d480c@KB6NAX>

It never helps to quote material without first doing some research. Use the

right stuff if you want the right results. See:

[http://gsa.simplegreen.com/gsa\\_products\\_extreme.php](http://gsa.simplegreen.com/gsa_products_extreme.php)

<http://www.skygeek.com/13412.html>

[http://www.simplegreen.com/solutions\\_faqs.php?search\\_query=aluminum](http://www.simplegreen.com/solutions_faqs.php?search_query=aluminum)

In the following example it's obvious the corroded airframe members are victims of a zero maintenance regime. Airframe inspection is a mandatory periodic aircraft maintenance requirement that even an E1 can understand needs to be adhered to if he wants to come back alive. An aircraft with that degree of corrosion was no doubt permanently grounded many moons ago unless it belongs to a Columbian drug smuggling operation....

<http://www.chinook-helicopter.com/maintenance/issues/cleaners/cleaners.html>

>From the website: "This site is for educational and entertainment purposes only. This site is not endorsed or sponsored by the United States Army, nor do any of the ideas, opinions, presentations, photographs, or concepts necessarily reflect those currently held by the United States Government. No animals were harmed in the creation of this website."

I sure hope not.

Arden Allen  
KB6NAX

If you get to thinking you're a person of  
some influence, try ordering somebody  
else's dog around. -Will Rogers

> "Never use a cleaning product on your  
> aircraft that has not been approved by  
> the Army. SIMPLE GREEN has not  
> been approved and is not authorized  
> for use as an aircraft wash.  
> It is highly corrosive on aircraft aluminum.  
> It also makes high-strength aircraft  
> alloys brittle. If your unit is using  
> SIMPLE GREEN as an aircraft wash,  
> STOP!  
>  
> If you have already used it, thoroughly  
> wash your aircraft with fresh  
> water and an approved Army aircraft  
> cleaning agent. ... Follow that  
> cleaning with a corrosion inspection

> and treatment and an application of  
> approved corrosion preventive compounds ... "  
>  
.....

From gumbear at pacbell.net Sat Mar 31 01:04:03 2012

From: gumbear at pacbell.net (Arden Allen)

Date: Fri, 30 Mar 2012 22:04:03 -0700

Subject: [BoatAnchors] Cleaning BA's...and careful rinsing! - soap stuff

References:

<1333135119.36502.YahooMailNeo@web45601.mail.sp1.yahoo.com><05360D81BEC7394D935D3F2F821B0EF701303FA38B@its-

hcwnem03.ds.Vanderbilt.edu><4F762BA8.1010305@earthlink.net><F9085B81-0047-4CAA-88DB-E0CEE19BDF2D@earthlink.net>

<4F76677F.6070407@earthlink.net>

Message-ID: <004d01cd0efb\$b56d1ee0\$fd9d480c@KB6NAX>

> ...."Ionic" means in this context any kind of soap stuff,

Here's some soap stuff, Scott ;-)

Arden

.....

Soap, any of a group of organic compounds that are metallic salts of fatty acids. A soap of tallow and wood ashes was used as early as the 1st cent. A.D. by Germanic tribes. In the American colonies it was made from waste fats and lye, which is a strong alkali leached from wood ashes. The resulting chemical reaction, called saponification, remains the basis of soap manufacture today. Fats and oils are heated with an alkali, e.g., sodium hydroxide (which gives hard soaps) or potassium hydroxide (which gives soft soaps). Sodium or potassium may be replaced in the alkali by other metals, e.g., aluminum, calcium, or magnesium, to make soaps used in industry as paint driers, ointments, and lubricating greases, and in waterproofing. After the alkali and fats have reacted, salt is added to form a curd of the soap. Glycerol (glycerin), a valuable by-product used as a solvent and sweetener, can then be removed by distillation. Varying the composition or method of processing affects the lathering, cleansing, and water-softening properties. Soap can be formed as bars, chips, flakes, beads, or powders and may contain perfumes, dyes, germicides, or so-called builders, which assist in rough cleaning. Like modern soapless detergents (usually sulfonated alcohols), soaps cleanse by lowering the surface tension of water, by emulsifying grease, and by absorbing dirt into the foam. Soap is less effective than detergent in hard water because the salts that make the water hard react with the soap to form insoluble curds (e.g., the "ring" left in bathtubs).

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From n5cm at rtconline.com Sat Mar 31 08:26:17 2012  
From: n5cm at rtconline.com (Ken)  
Date: Sat, 31 Mar 2012 07:26:17 -0500  
Subject: [BoatAnchors] Question.  
Message-ID: <000a01cd0f39\$78eef090\$6401a8c0@yourb27fb1c401>

Fellows,

I have the following that I would like identified. All octal bases.

- 1 - MDA1591-1 7007 Marked Motorola.
- 2 - 949664-1 one a little smaller (maybe later issue).  
Both RCA

I replaced the 5U4 in my HQ-129-X and the saving in HEAT was phenominal!

Many thanks for info!

Ken N5CM

=====  
Email scanned by PC Tools - No viruses or spyware found.  
(Email Guard: 7.0.0.18, Virus/Spyware Database: 6.19570)  
<http://www.pctools.com/>  
=====

From WA1KBQ at aol.com Sat Mar 31 09:58:53 2012  
From: WA1KBQ at aol.com (WA1KBQ at aol.com)  
Date: Sat, 31 Mar 2012 09:58:53 -0400 (EDT)  
Subject: [BoatAnchors] Cleaning BA's...  
Message-ID: <23c1f.1b5002ab.3ca8679d@aol.com>

Offering cleaning advice is usually about as well received as posting one's opinion on how to pack equipment for shipping. Everyone has adopted a personal pet procedure and you're not about to change anyone's mind about it.

Concerning the subject of ionizing surfactants... If our usual acquisitions were all pristine a light cleaning with Windex, etc., would probably be

sufficient, however, this is often not the case. Some of this stuff comes with so much dirt and debris (and corrosion) deposited on all surfaces that more drastic measures are necessary if we are to return the equipment to a presentable appearance with a reasonable amount of effort. I see no problem with using ionizing cleaners provided you have established a good procedure. This would include a fairly substantial disassembly to facilitate a thorough cleaning followed by a very thorough rinsing, blow dry and time in the oven at 170, and an application of a corrosion inhibitor afterwards if necessary. I installed an oven in my cleaning room just for that purpose. Incidentally, sodium hydroxide is better known as old fashioned lye (caustic soda) which will react with aluminum chemically. You will need to know a little about materials to be cleaned and choice of cleaning agents.

Regards, Greg

In a message dated 3/31/2012 1:05:22 A.M. Eastern Daylight Time, gumbear at pacbell.net writes:

> ...."Ionic" means in this context any kind of soap stuff,

Here's some soap stuff, Scott ;-)

Arden

.....

Soap, any of a group of organic compounds that are metallic salts of fatty acids. A soap of tallow and wood ashes was used as early as the 1st cent. A.D. by Germanic tribes. In the American colonies it was made from waste fats and lye, which is a strong alkali leached from wood ashes. The resulting chemical reaction, called saponification, remains the basis of soap manufacture today. Fats and oils are heated with an alkali, e.g., sodium hydroxide (which gives hard soaps) or potassium hydroxide (which gives soft soaps). Sodium or potassium may be replaced in the alkali by other metals, e.g., aluminum, calcium, or magnesium, to make soaps used in industry as paint driers, ointments, and lubricating greases, and in waterproofing. After the alkali and fats have reacted, salt is added to form

a curd of the soap. Glycerol (glycerin), a valuable by-product used as a solvent and sweetener, can then be removed by distillation. Varying the composition or method of processing affects the lathering, cleansing, and water-softening properties. Soap can be formed as bars, chips, flakes, beads, or powders and may contain perfumes, dyes, germicides, or so-called

builders, which assist in rough cleaning. Like modern soapless detergents (usually sulfonated alcohols), soaps cleanse by lowering the surface tension of water, by emulsifying grease, and by absorbing dirt into the foam. Soap is less effective than detergent in hard water because the salts that make the water hard react with the soap to form insoluble curds (e.g., the "ring" left in bathtubs).

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BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

From wb0eq at yahoo.com Sat Mar 31 10:09:22 2012  
From: wb0eq at yahoo.com (John Sehring)  
Date: Sat, 31 Mar 2012 07:09:22 -0700 (PDT)  
Subject: [BoatAnchors] MaxTrac LowBand adjustments  
Message-ID: <1333202962.50425.YahooMailNeo@web45606.mail.sp1.yahoo.com>

Thanks for a really nice, concise list of MaxTracs adjustments, Mike.

>The smaller of the 3 compartments, just to the right of the 14 pin RF board to logic board connector, and under the VCO/PLL/synthesizer sub cover is the receiver >noise blanker which has 3 adjustable inductors, usually this will not need to be adjusted, if it does then it requires some other special test equipment that I can't get i>nto right now so hopefully nobody has screwed up your radios noise blanker.

?

User can also shut the noise blanker off.? Just hold the "Mon" button in about 2 secs until a minus sign appears on left side of LED display.? Do same to reactivate it.? NB will be back on when radio is turned off/on again.

Only reason I can think of to do this is if you suspect that something around the NB's sampling frequency is cros-modulating into the IF strip via the NB. Oh, when mobile, to see if it's working properly.

I've got the little Moto test thingy, TEK-21--it produces a pulsed output, to activate the NB.? Also took me along time to find paper for it.? It's now on Repeater Builder site, some kind soul must've added it, thanks!? BTW, have not had occasion to use it--yet.



--John Sehring VE6/WB0EQ nr. Calgary, Alberta, Canada

From arc5 at ix.netcom.com Sat Mar 31 10:36:51 2012  
From: arc5 at ix.netcom.com (arc5 at ix.netcom.com)  
Date: Sat, 31 Mar 2012 14:36:51 +0000  
Subject: [BoatAnchors] Cleaning BA's...  
Message-ID: <20120331143651.59DBE4C21F@attmconn15.att.oz.com>

-----Original Message-----

From: <WA1KBQ at aol.com>  
To: <gumbear at pacbell.net>, <spr at earthlink.net>, <k1lky at earthlink.net>, <WA1KBQ at aol.com>  
Cc: <boatanchors at theporch.com>  
Date: Saturday, March 31, 2012 9:58:53 AM GMT-4  
Subject: Re: [BoatAnchors] Cleaning BA's...

Offering cleaning advice is usually about as well received as posting one's opinion on how to pack equipment for shipping. Everyone has adopted a personal pet procedure and you're not about to change anyone's mind about it.

Concerning the subject of ionizing surfactants... If our usual acquisitions were all pristine a light cleaning with Windex, etc., would probably be sufficient, however, this is often not the case. Some of this stuff comes with so much dirt and debris (and corrosion) deposited on all surfaces that more drastic measures are necessary if we are to return the equipment to a presentable appearance with a reasonable amount of effort. I see no problem with using ionizing cleaners provided you have established a good procedure. This would include a fairly substantial disassembly to facilitate a thorough cleaning followed by a very thorough rinsing, blow dry and time in the oven at 170, and an application of a corrosion inhibitor afterwards if necessary. I installed an oven in my cleaning room just for that purpose. Incidentally, sodium hydroxide is better known as old fashioned lye (caustic soda) which will react with aluminum chemically. You will need to know a little about materials to be cleaned and choice of cleaning agents.

Regards, Greg

In a message dated 3/31/2012 1:05:22 A.M. Eastern Daylight Time, gumbear at pacbell.net writes:

> ...."Ionic" means in this context any kind of soap stuff,

Here's some soap stuff, Scott ;-)

Arden

.....

Soap, any of a group of organic compounds that are metallic salts of fatty acids. A soap of tallow and wood ashes was used as early as the 1st cent. A.D. by Germanic tribes. In the American colonies it was made from waste fats and lye, which is a strong alkali leached from wood ashes. The resulting chemical reaction, called saponification, remains the basis of soap manufacture today. Fats and oils are heated with an alkali, e.g., sodium hydroxide (which gives hard soaps) or potassium hydroxide (which gives soft soaps). Sodium or potassium may be replaced in the alkali by other metals, e.g., aluminum, calcium, or magnesium, to make soaps used in industry as paint driers, ointments, and lubricating greases, and in waterproofing. After the alkali and fats have reacted, salt is added to form

a curd of the soap. Glycerol (glycerin), a valuable by-product used as a solvent and sweetener, can then be removed by distillation. Varying the composition or method of processing affects the lathering, cleansing, and water-softening properties. Soap can be formed as bars, chips, flakes, beads, or powders and may contain perfumes, dyes, germicides, or so-called builders, which assist in rough cleaning. Like modern soapless detergents (usually sulfonated alcohols), soaps cleanse by lowering the surface tension

of water, by emulsifying grease, and by absorbing dirt into the foam. Soap is less effective than detergent in hard water because the salts that make the water hard react with the soap to form insoluble curds (e.g., the "ring" left in bathtubs).

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BoatAnchors mailing list  
BoatAnchors at theporch.com  
<https://minime.theporch.com/mailman/listinfo/boatanchors>

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From ddillman at igc.org Sat Mar 31 10:46:33 2012  
From: ddillman at igc.org (Richard Dillman)  
Date: Sat, 31 Mar 2012 07:46:33 -0700 (GMT-07:00)  
Subject: [BoatAnchors] Possible MRHS Operations Disruption 31 March  
Message-ID: <10284518.1333205193560.JavaMail.root@elwamui-muscovy.atl.sa.earthlink.net>

It's a windy and rainy morning here on the northern California coast and power appears to be out once again at the receive site. If that continues to be the case K6KPH will not be available. KSM may extend press and weather broadcasts on CW and RTTY but will not be available to answer calls from ships.

Regards,

RD

=====  
Richard Dillman, WPE2VT  
Chief Operator, Coast Station KSM  
Maritime Radio Historical Society  
<http://www.radiomarine.org>  
=====

From spr at earthlink.net Sat Mar 31 13:30:42 2012  
From: spr at earthlink.net (Scott Robinson)  
Date: Sat, 31 Mar 2012 10:30:42 -0700  
Subject: [BoatAnchors] Cleaning BA's...  
In-Reply-To: <20120331143651.59DBE4C21F@attemconn15.att.oz.com>  
References: <20120331143651.59DBE4C21F@attemconn15.att.oz.com>  
Message-ID: <4F773F42.10200@earthlink.net>

Hi Greg,

Your procedure seems fine to me, but I posted what I did because I feared that some BA-ers would clean until shiny and stop there, never doing the necessary highly compulsive rinsing processes. You clearly know more chemistry than most!

My restoration intentions are these, in order of importance, (1= most important):

- 1) keep the equipment preserved for the long term;
- 2) make it work as well as new...and sometimes better\*;
- 3) clean it as well as I can, giving priority to (1) and (2), above.

\*I am not opposed to some modifications, but I try never to add holes where they can be seen. In any case, the radio belongs to its owner/restorer and it's his call.

Regards,

Scott

PS-Arden, We agree about soap, it's fat glued to metal ions, and ionically active.

/scott, again

On 3/31/12 7:36 AM, arc5 at ix.netcom.com wrote:

>

>

> -----Original Message-----

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> To:<gumbear at pacbell.net>,<spr at earthlink.net>,<k1lky at earthlink.net>,<WA1KBQ at aol.com>

> Cc:<boatanchors at theporch.com>

> Date: Saturday, March 31, 2012 9:58:53 AM GMT-4

> Subject: Re: [BoatAnchors] Cleaning BA's...

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>

From gumbear at pacbell.net Sat Mar 31 14:04:19 2012  
From: gumbear at pacbell.net (Arden Allen)  
Date: Sat, 31 Mar 2012 11:04:19 -0700  
Subject: [BoatAnchors] Cleaning BA's...  
References: <20120331143651.59DBE4C21F@attemconn15.att.oz.com>  
<4F773F42.10200@earthlink.net>  
Message-ID: <001001cd0f68\$b6ebe220\$6d9e480c@KB6NAX>

Scott, I'm not a chemist and my high school chemistry is only a hint of what I should understand. But I learned from sad experience to do only enough to get satisfactory results. Overkill can kill what you want so save.

It's kind of similar to killing wolves so there are more elk to kill so that with man's great misguided intentions nature is less healthy. The proof is plain to see.

(here comes the thunder from the NRA)

Arden

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